SONY

SIGNAL PROCESSING UNIT

PFV-SP3300

BACKUP POWER SUPPLY UNIT

HK-PSU03

MAINTENANCE MANUAL

1st Edition

Serial No. 10001 and Higher (PFV-SP3300)

Serial No. 10001 and Higher (HK-PSU03)

⚠警告

このマニュアルは，サービス専用です。
お客様が，このマニュアルに記載された設置や保守，点検，修理などを行うと感電や火災，人身事故につながることがあります。
危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l’entretien. Afin de réduire les risques de décharge électrique, d’incendie ou de blessure n’effectuer que les réparations indiquées dans le mode d’emploi à moins d’être qualifié pour en effectuer d’autres. Pour toute réparation faire appel à une personne compétente uniquement.

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Manual Structure

Purpose of this manual

This manual is the maintenance manual of Signal Processing Unit PFV-SP3300 and Backup Power Supply Unit HK-PSU03.
This manual is intended for use by trained system and service engineers, and describes the information of maintenance and detailed service.

Note

The functions and specifications of HK-PSU03 and PFV-SP3300's power supply unit are equal. This manual uses "Power Supply Unit" for HK-PSU03 and PFV-SP3300's power supply unit.

Contents

This manual is organized by following sections.

Section 1 Service Overview

This section explains the removing cabinet, main parts location, status indications, replacement of main parts, IC link replacement, how to use the extension board.

Section 2 Spare Parts

This section describes the spare parts.

Section 3 Semiconductor Pin Assignments

This section contains information on semiconductors used for unit.
It includes a complete list of the semiconductors and their ID Nos. for retrieving information on "Semiconductor Pin Assignments" CD-ROM, which is available separately.
Please refer to this section together with the "Semiconductor Pin Assignments" CD-ROM.
Information on the semiconductors not contained in the CD-ROM at the time of issue of this manual, if any, is given in this section as well.

Section 4 Circuit Description and Overall Block Diagram

This section describes the detailed function of IF-828 board and overall block diagram.

Section 5 Schematic Diagrams

This section describes the schematic diagrams of the boards.

Section 6 Board Layouts

This section describes the board layouts and locations of components.

Related manuals

The following manuals are prepared for the PFV-SP3300 and HK-PSU03.

- **Operation Manual (Supplied with PFV-SP3300)**
  This manual describes the notes on operating, the locations and functions of parts, and controls of PFV-SP3300.

- **Installation Manual (Supplied with PFV-SP3300)**
  This manual describes the information on installing the PFV-SP3300 and HK-PSU03.

- **“Semiconductor Pin Assignments” CD-ROM (Available on request)**
  This “Semiconductor Pin Assignments” CD-ROM allows you to search for semiconductors used in Communication System Solutions Network Company equipment.
  Semiconductors that cannot be searched for on this CD-ROM are listed in the service manual for the corresponding unit. The service manual contains a complete list of all semiconductors and their ID Nos., and thus should be used together with the CD-ROM.
  Part number: 9-968-546-XX

Section 1
Service Overview

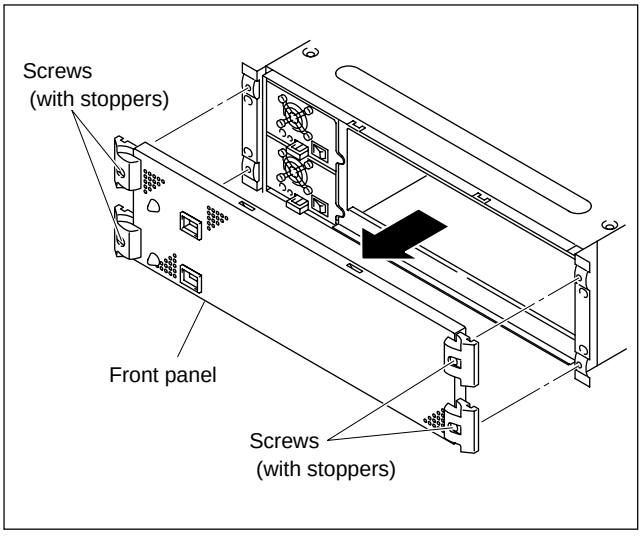
1-1. Removal of Cabinet

WARNING

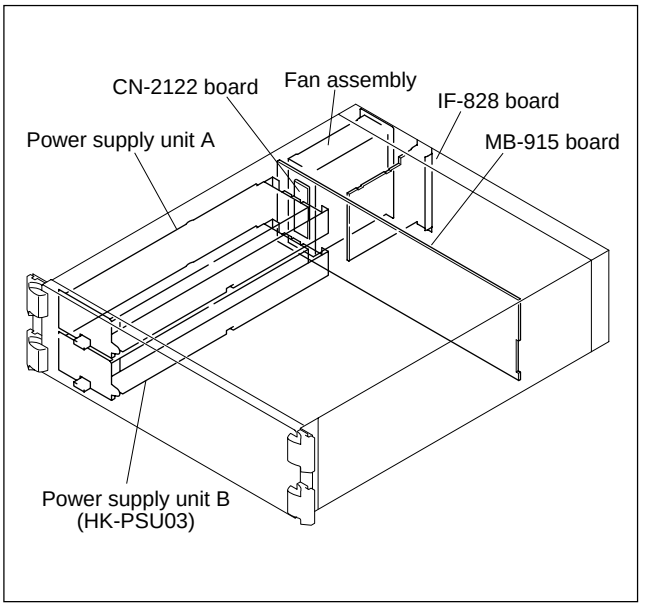
Before starting the removal, be sure to turn off the power of both power supply units and pull out the power plugs from the wall outlets.

Front panel

Loosen the four screws fully, then remove the front panel.

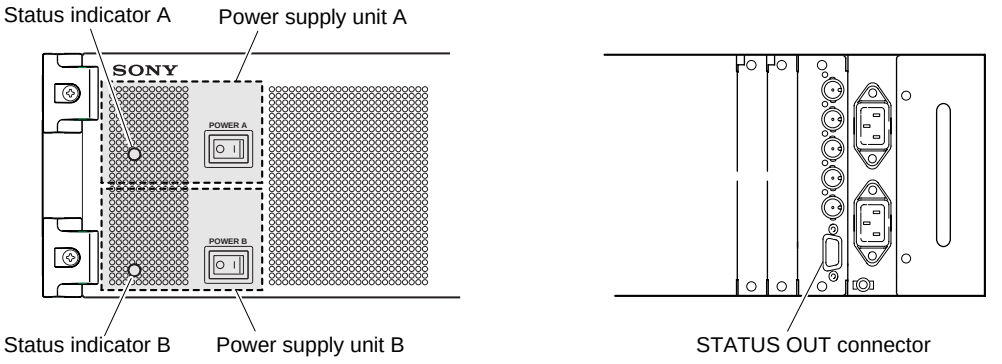


1-2. Main Parts Location



1-3. Status Indicators

Status indicators A and B on the front panel always display the state of this unit (including the power units or optional boards). The state of this unit can also be viewed using the STATUS OUT connector at the rear of this unit.



When one power supply unit (A) is installed (in the upper slot)

Indicator A	State	STATUS OUT connector				
		1pin PS-A ERROR	2pin PS-B ERROR	3pin FAN ERROR	4pin BOARD ERROR	5pin BOARD WARNING
Lights in green	Normal operation	Low	Low	Low	Low	Low
Blinks in green	Warning is generated on the optional board.	Low	Low	Low	Low	High
Blinks in red	An error occurs on the optional board.	Low	Low	Low	High	Low
	The current consumption overflows.	Low	Low	Low	High	Low
	The fan at the rear of this unit stops.	Low	Low	High	Low	Low
Lights in red	Abnormality occurs at the output voltage of power supply unit A.	High	Low	Low	Low	Low
	Abnormality occurs in the fan of power supply unit A.	High	Low	Low	Low	Low
Off	Abnormality occurs in power supply unit A.	High	High	High	High	High
	The switch of power supply unit A is turned off.	High	High	High	High	High

When two power supply units are installed

Indicator A	Indicator B	State	STATUS OUT connector				
			1pin PS-A ERROR	2pin PS-B ERROR	3pin FAN ERROR	4pin BOARD ERROR	5pin BOARD WARNING
Lights in green	Lights in green	Normal operation	Low	Low	Low	Low	Low
Blinks in green	Blinks in green	Warning is generated on the optional board.	Low	Low	Low	Low	High
Blinks in red	Blinks in red	An error occurs on the optional board.	Low	Low	Low	High	Low
		The current consumption overflows.	Low	Low	Low	High	Low
		The fan at the rear of this unit stops.	Low	Low	High	Low	Low
Lights in red	Lights in green	Abnormality occurs at the output voltage of power supply unit A.	High	Low	Low	Low	Low
		Abnormality occurs in the fan of power supply unit A.	High	Low	Low	Low	Low
Off	Lights in green	Abnormality occurs in power supply unit A.	High	Low	Low	Low	Low
		The switch of power supply unit A is turned off.	High	Low	Low	Low	Low
Lights in green	Lights in red	Abnormality occurs at the output voltage of power supply unit B.	Low	High	Low	Low	Low
		Abnormality occurs in the fan of power supply unit B.	Low	High	Low	Low	Low
Lights in green	Off	Abnormality occurs in power supply unit B.	Low	High	Low	Low	Low
		The switch of power supply unit B is turned off.	Low	High	Low	Low	Low
Off	Off	Abnormality occurs in both power supply units A and B.	High	High	High	High	High
		The switches of power supply units A and B are turned off.	High	High	High	High	High

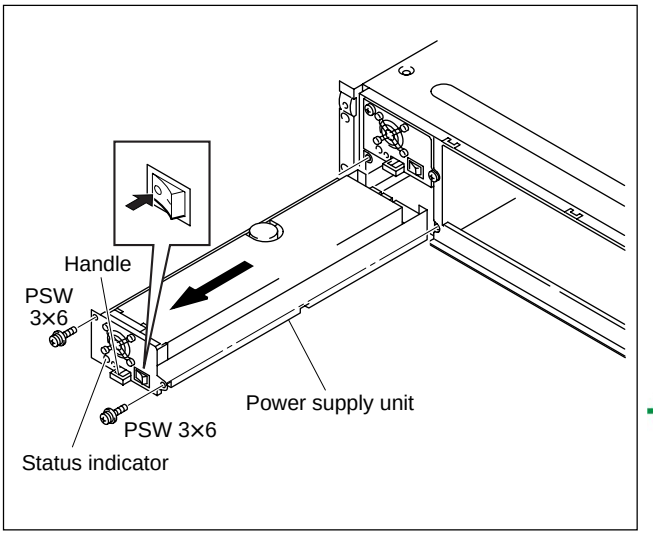
Low: The open collector is ON.
High: The open collector is OFF.

1-4. Replacement of Power Supply Unit

WARNING

Before starting the replacement, be sure to turn off the power of both power supply units and pull out the power plugs from the wall outlets.

1. Remove the front panel. (Refer to Section 1-1.)
2. Remove the two screws and pull out the switching regulator while holding the handle.
3. Set the power switch of a new power supply unit to the "O" (OFF) position.



4. Install the new switching regulator in the reverse order of steps 1 and 2.

Note

Make sure that the status indicator on the front panel lights in green when the power is turned on.

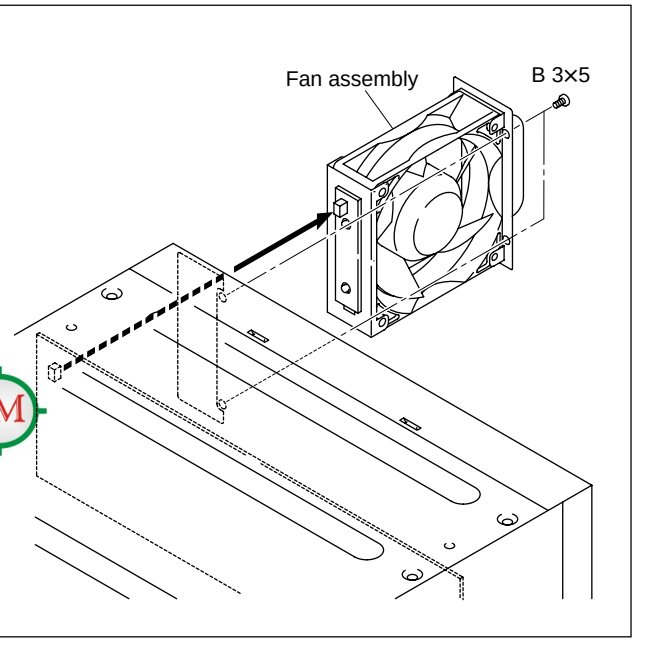
1-5. Replacement of Fan

WARNING

Before starting the replacement, be sure to turn off the power of both power supply units and pull out the power plugs from the wall outlets.

1-5-1. Replacement of Fan Assembly

1. Remove the two screws, then pull out the fan assembly.



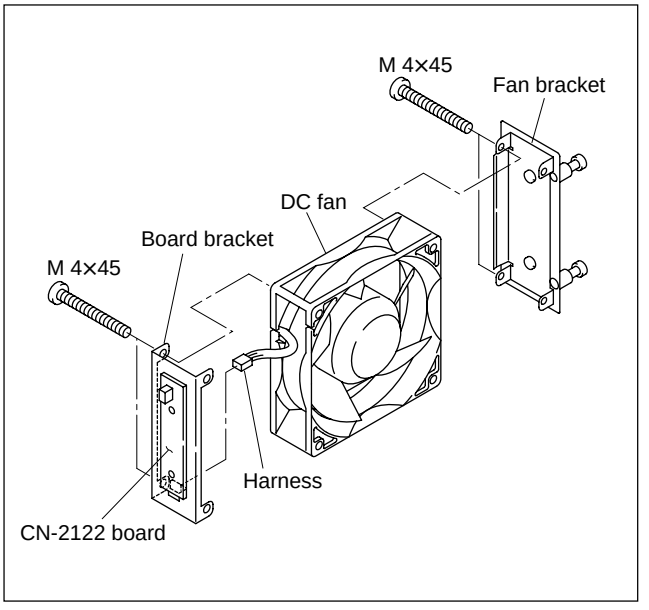
2. Install a new fan assembly to the PFV-SP3300 with the two screws.

1-5-2. Replacement of DC Fan

1. Remove the fan assembly. (Refer to Section 1-5-1.)
2. Remove the two screws each, then remove the fan bracket and board bracket.

   Note

   The DC fan and board bracket are connected using a harness. Remove the board bracket slowly from the DC fan.
3. Disconnect the connector of the harness from the CN-2122 board.



4. Install a new DC fan in the reverse order of steps 1 to 3.

Note

Be careful not to interpose the harness when installing the board bracket.

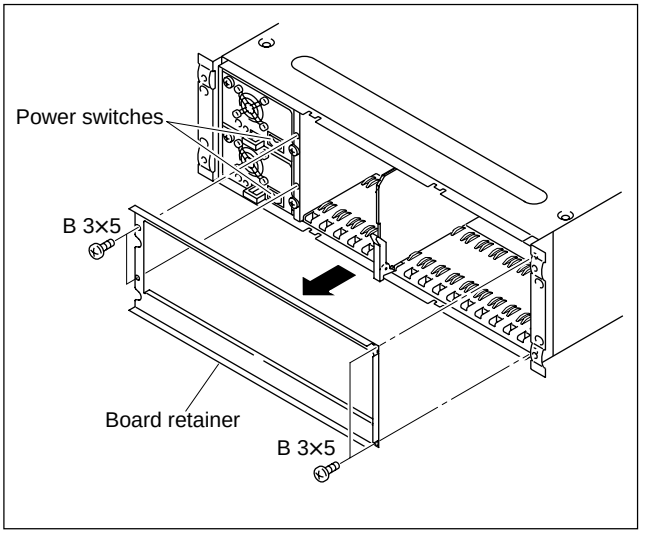
1-6. Replacement of Board

WARNING

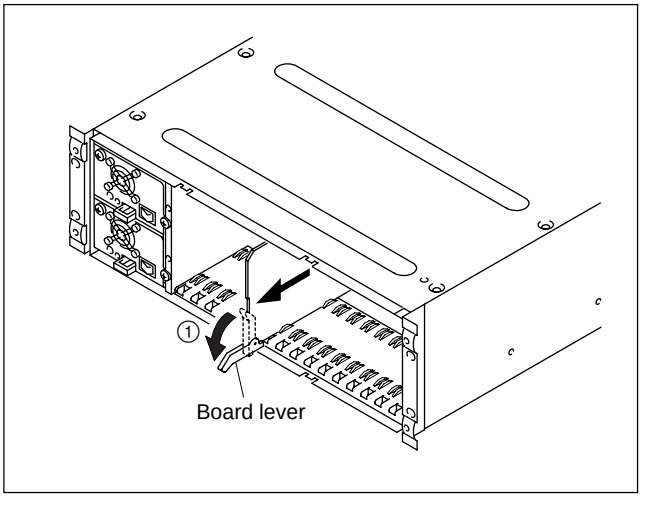
Before starting the replacement, be sure to turn off the power of both power supply units and pull out the power plugs from the wall outlets.

1-6-1. Main Board

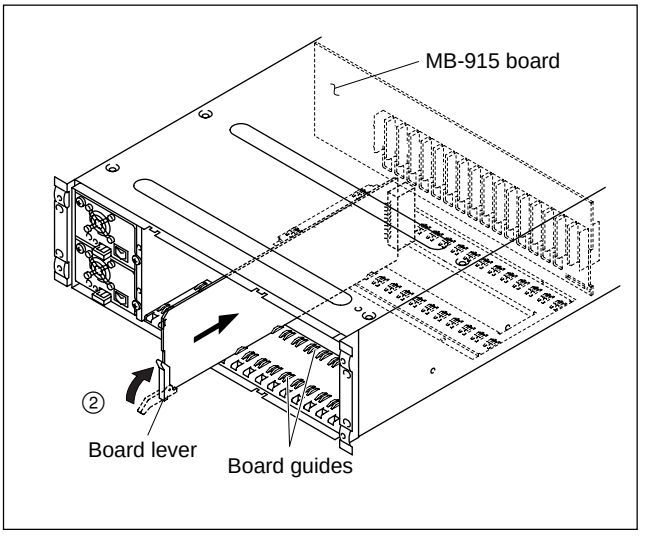
1. Remove the front panel. (Refer to Section 1-1.)
2. Remove the four screws, then remove the board retainer.



3. Turn the board lever in the direction of the arrow ①, then pull out the board toward you.



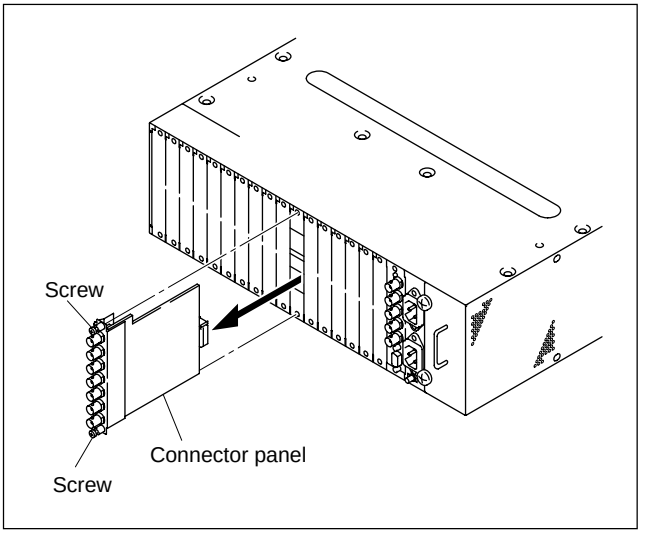
4. Turn the board lever of a new board in the direction of the arrow ②, insert the board along the board guides, then push it until it is securely connected to the connector on the MB-915 board.



5. Install the board retainer.
6. Install the front panel.

1-6-2. Connector Panel

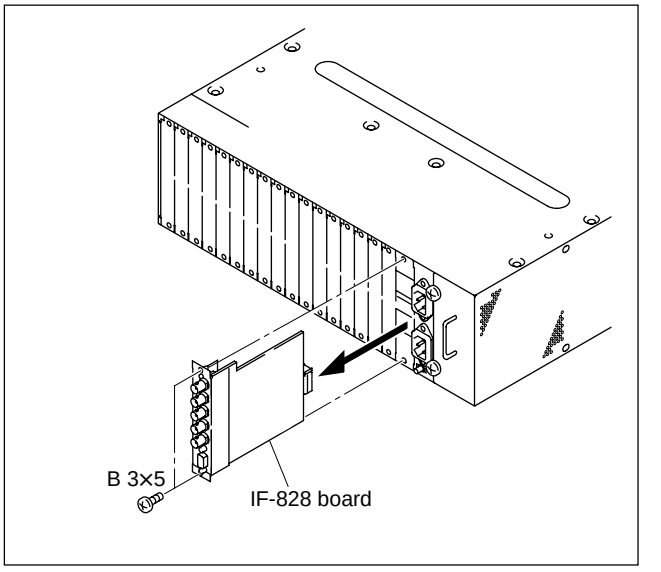
1. Loosen the two screws, then remove the connector panel.



2. Install a new connector panel to the PFV-SP3300 with the two screws.

1-6-3. IF-828 Board

1. Remove the two screws, then remove the IF-828 board.



2. Install a new IF-828 board to the PFV-SP3300 with the two screws.

1-7. Replacement of IC Link

WARNING

An IC link is critical parts to safe operation.
Replace this component with Sony parts whose part numbers appear in this manual published by Sony.
If not, this may cause a fire or electric shock.
Be sure to use the specified component in this manual.

The IC link is mounted on the CN-2122 and IF-828 boards. Be sure to replace with the specified IC link as shown below after removing the foreign substances that may cause the shorts.

CN-2122 board

Ref No. (Address)	Description	Parts No.
PS1(B-1)	Circuit Protector IC link 2A	⚠1-533-282-21

IF-828 board

Ref No. (Address)	Description	Parts No.
PS501(B-2)	Circuit Protector IC link 2A	⚠1-533-282-21

1-8. Extension Board

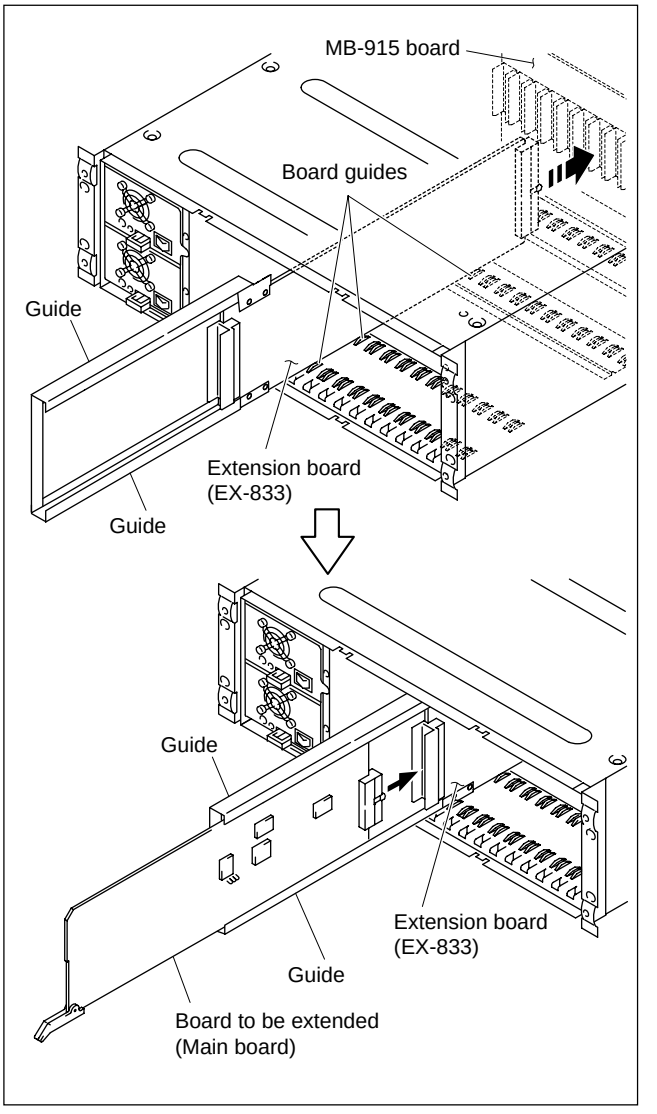
The following extension boards are ready for PFV-SP3300 as optional accessories.

Extension board	Parts No.	Apply to
EX-833	A-8327-356-A	For main board
EX-834	A-8327-357-A	For connector panel

This section describes how to install and remove the EX-833 and EX-834 boards in and from the PFV-SP3300.

Installation (Main board)

1. Turn off the power switches of PFV-SP3300.
2. Remove the front panel. (Refer to Section 1-1.)
3. Remove the board retainer. (Refer to Section 1-6-1.)
4. Remove the board to be extended. (Refer to Section 1-6-1.)
5. Insert the EX-833 board along the board guides.
6. Insert the EX-833 board into the slot as far as it will go and securely connect it to the connector on the MB-915 board.
7. Insert the board to be extended along the guides on the EX-833 board.
8. Push the board to be extended and securely connect it to the EX-833 board.

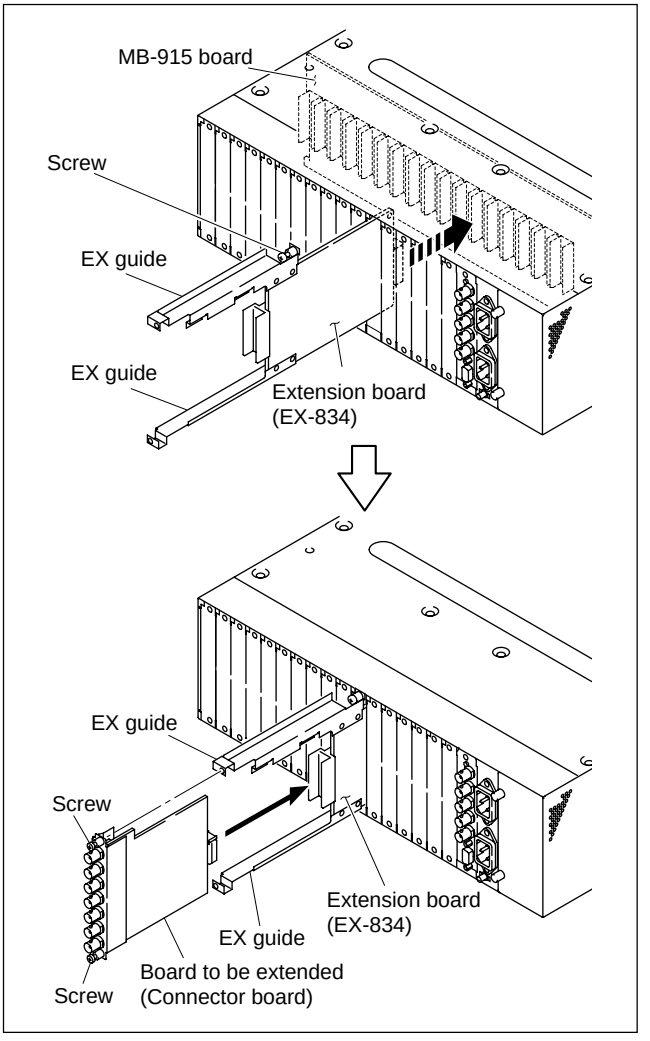


Removal

1. Pull out the extended board from the EX-833 board.
2. Pull out the EX-833 board from the slot.
3. Reinstall the extended board in the slot.

Installation (Connector board)

1. Turn off the power switches of PFV-SP3300.
2. Remove the board to be extended. (Refer to Section 1-6-2.)
3. Insert the EX-834 board into the slot as far as it will go and securely connect it to the connector on the MB-915 board.
4. Secure one screw of the EX-834 board.
5. Insert the board to be extended along the EX guides on the EX-834 board.
6. Push the board to be extended and securely connect it to the EX-834 board.
7. Secure the two screws of the extended board.



Removal

1. Loosen the two screws, then pull out the extended board from the EX-834 board.
2. Loosen one screw, then pull out the EX-834 board from the slot.
3. Reinstall the extended board in the slot.

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Section 2
Spare Parts

2-1. Notes on Repair Parts

1. Safety Related Components Warning

WARNING

Components marked ⚠ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.
Parts list has the present standardized repair parts.

3. Stock of Parts

Parts marked with “o” at SP (Supply Code) column of the spare parts list may not be stocked. Therefore, the delivery date will be delayed.

4. Harness

Harnesses with no part number are not registered as spare parts.
In need of repair, get components shown in the list and repair using them.

2-1. 補修部品注意事項

1. 安全重要部品

⚠警告

⚠印のついた部品は安全性を維持するために重要な部品です。したがって，交換する時は必ず指定の部品を使ってください。

2. 部品の共通化

ソニーから供給する補修用部品は，セットに使われているものと異なることがあります。
これは部品の共通化，改良等によるものです。
部品表には現時点での共通化された補修用部品が記載されています。

3. 部品の在庫

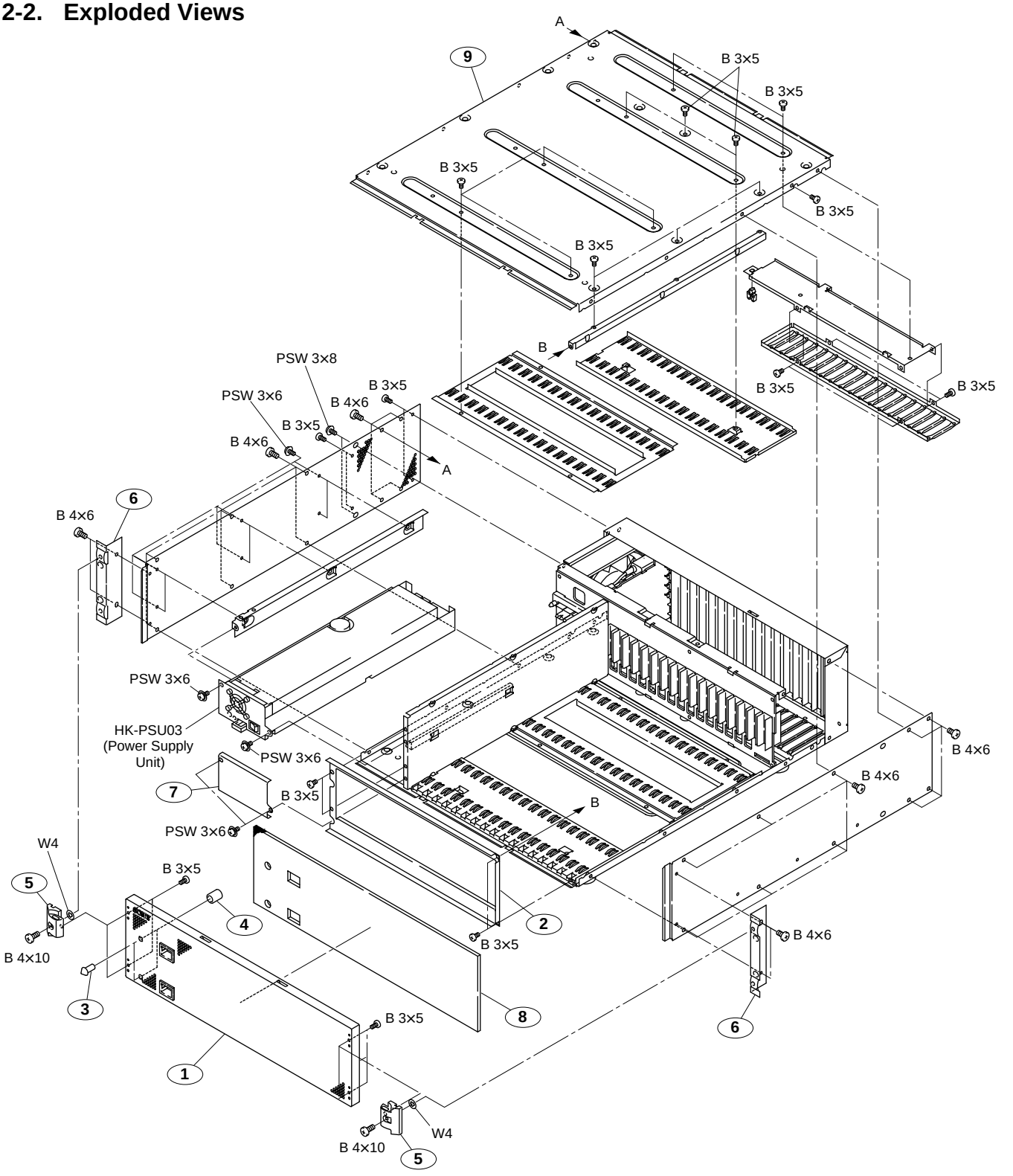
部品表のSP (Supply code) 欄に“o”で示される部品は在庫していないことがあり，納期が長くなることがあります。

4. ハーネス

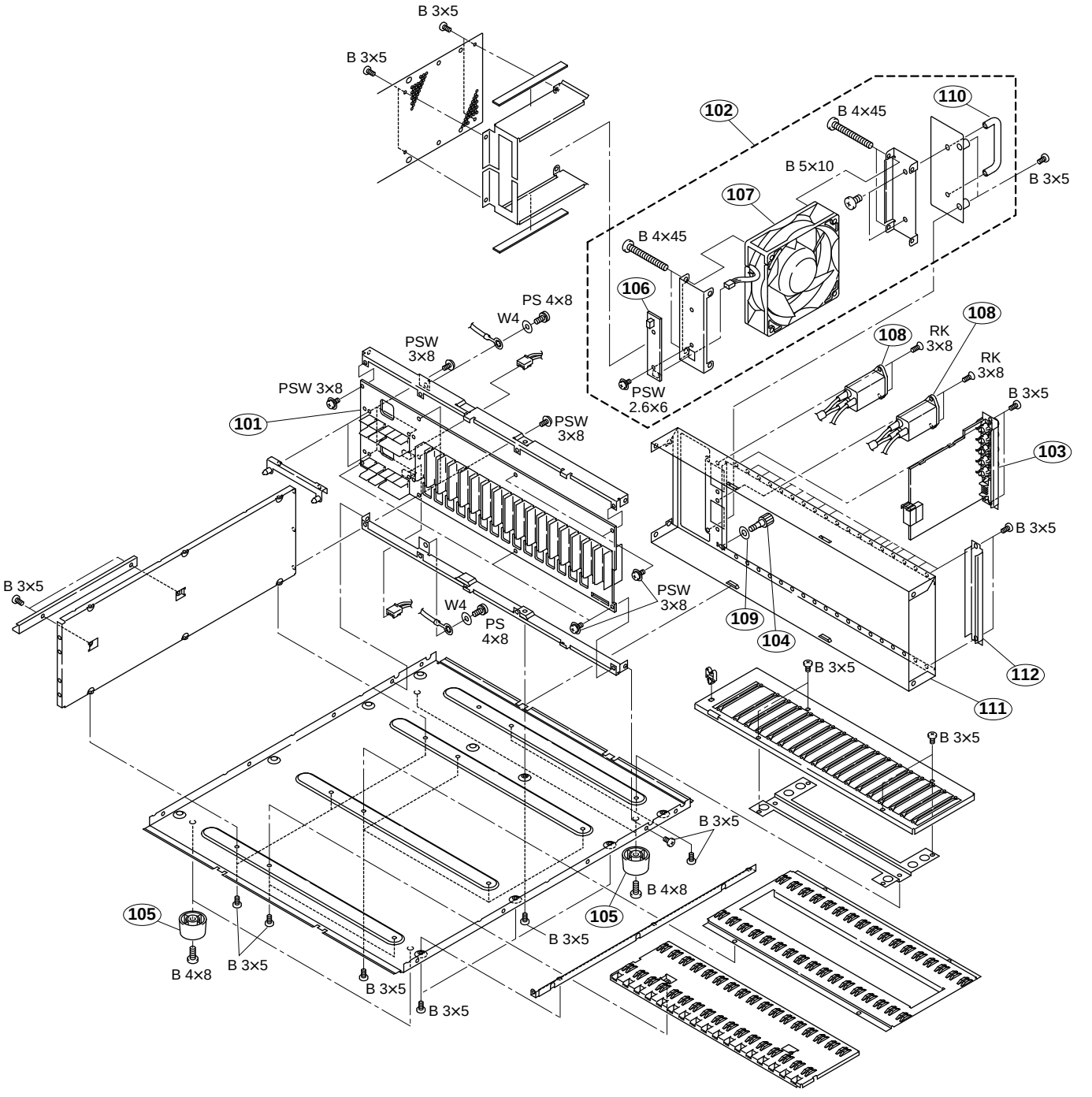
部品番号が記載されていないハーネスは，サービス部品として登録されていません。
これらは，リストに展開されているコンポーネント部品で補修してください。

Front Panel Block

2-2. Exploded Views



No.	Part No.	SP	Description	Part No.	SP	Description	
1	X-3608-107-3	o	PANEL SUB ASSY,FRONT	3-624-821-01	s	+PSW3X6(CU,NI)	
2	X-3608-108-1	o	STOPPER ASSY,SWITCH BOARD	3-624-822-01	s	+PSW3X8(CU,NI)	
3	3-193-264-01	o	ACRYLIC, PW	3-650-537-00	o	WASHER	(PLA)
4	3-200-188-01	o	FRAME, OUTER	3-733-690-01	s	SCREW +B 4X6	
5	3-624-859-02	o	BRACKET, PANEL	7-682-546-04	s	SCREW +B3X5	
6	3-625-953-02	o	BRACKET(3U),RACK MOUNT	7-682-562-04	s	SCREW +B4X10	
7	3-625-955-01	o	DUMMY PANEL(3U),POWER				
8	3-628-313-01	o	FILTER(3U)				
9	3-629-381-01	o	PLATE,TOP				



No.	Part No.	SP	Description
101	A-8326-973-A	o	MOUNTED CIRCUIT BOARD, MB-915
102	A-8326-977-A	o	FAN ASSY
103	A-8326-978-A	o	MOUNTED CIRCUIT BOARD, IF-828
104	X-2068-004-0	s	TERMINAL ASSY
105	X-3605-751-1	s	FOOT ASSY (ABS)
106	1-679-666-11	o	PRINTED WIRING BOARD, CN-2122
107	1-698-873-11	s	FAN, DC
108	1-960-173-11	o	HARNESS (WITH INLET)
109	2-068-008-00	s	WASHER
110	2-241-803-00	o	HANDLE
111	3-629-388-01	o	PANEL,REAR
112	3-629-391-02	o	PANEL(BLANK),CN

Part No.	SP	Description
7-621-759-40	s	SCREW +PSW 2.6X6
7-682-348-09	s	SCREW +RK 3X8
7-682-546-04	s	SCREW +B3X5
7-682-561-09	s	SCREW +B4X8
7-682-571-09	s	SCREW +B4X45
7-682-575-04	s	SCREW +B5X10
7-682-661-01	s	SCREW,+PS 4X8
7-682-948-09	s	SCREW +PSW 3X8
7-688-004-11	o	WASHER W4, MIDDLE

2-3. Electrical Parts List

CN-2122 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-679-666-11	o	PRINTED WIRING BOARD, CN-2122
C1	1-164-346-11	s	CAPACITOR CHIP CERAMIC 1MF/16V
C2	1-164-346-11	s	CAPACITOR CHIP CERAMIC 1MF/16V
CN1	1-764-886-12	o	PIN, CONNECTOR (PC BOARD) 8P
CN2	1-560-357-11	o	CONNECTOR POST HEADER,ILG (3P)
FL1	1-239-466-21	s	FILTER, EMI
PS1	⚠ 1-533-282-21	s	CIRCUIT PROTECTOR 2A (3225)

IF-828 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8326-978-A	o	MOUNTED CIRCUIT BOARD, IF-828
10pcs	7-621-770-87	s	SCREW +B2.6X5
C101	1-131-661-11	s	CAPACITOR,ELECT 100MF/10V CHIP
C102	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C103	1-126-396-11	s	CAPACITOR,ELECT 47MF/16V(CHIP)
C104	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C105	1-128-396-11	s	CAPACITOR,ELECT 470MF/10V CHIP
C106	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C107	1-164-315-11	s	CAPACITOR,CERAMIC 470PF/50V CH
C108	1-128-396-11	s	CAPACITOR,ELECT 470MF/10V CHIP
C109	1-128-396-11	s	CAPACITOR,ELECT 470MF/10V CHIP
C110	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C111	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C112	1-115-467-11	s	CAPACITOR CERAMIC 0.22MF/10V B
C113	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C201	1-131-661-11	s	CAPACITOR,ELECT 100MF/10V CHIP
C202	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C203	1-126-396-11	s	CAPACITOR,ELECT 47MF/16V(CHIP)
C204	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C205	1-128-396-11	s	CAPACITOR,ELECT 470MF/10V CHIP
C206	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C207	1-164-315-11	s	CAPACITOR,CERAMIC 470PF/50V CH
C208	1-128-396-11	s	CAPACITOR,ELECT 470MF/10V CHIP
C209	1-128-396-11	s	CAPACITOR,ELECT 470MF/10V CHIP
C210	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C211	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C212	1-115-467-11	s	CAPACITOR CERAMIC 0.22MF/10V B
C401	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C402	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C403	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C404	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C405	1-126-394-11	s	CAPACITOR,ELECT 10MF/16V(CHIP)
C406	1-126-394-11	s	CAPACITOR,ELECT 10MF/16V(CHIP)
C407	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C408	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C409	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C410	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C411	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C412	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C413	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C501	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C502	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C503	1-126-396-11	s	CAPACITOR,ELECT 47MF/16V(CHIP)
C504	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C505	1-126-394-11	s	CAPACITOR,ELECT 10MF/16V(CHIP)
C506	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C507	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C508	1-126-396-11	s	CAPACITOR,ELECT 47MF/16V(CHIP)
C509	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C510	1-126-394-11	s	CAPACITOR,ELECT 10MF/16V(CHIP)
CN101	1-793-324-11	o	CONNECTOR, COAXIAL (BNC TYPE)
CN102	1-793-324-11	o	CONNECTOR, COAXIAL (BNC TYPE)
CN201	1-793-324-11	o	CONNECTOR, COAXIAL (BNC TYPE)
CN202	1-793-324-11	o	CONNECTOR, COAXIAL (BNC TYPE)
CN301	1-793-324-11	o	CONNECTOR, COAXIAL (BNC TYPE)
CN401	1-764-642-11	o	CONNECTOR,D-SUB 15P
D101	8-719-820-41	s	DIODE 1SS302

(IF-828 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
D201	8-719-820-41	s	DIODE 1SS302
D401	8-719-820-41	s	DIODE 1SS302
D402	8-719-820-41	s	DIODE 1SS302
D403	8-719-820-41	s	DIODE 1SS302
D404	8-719-820-41	s	DIODE 1SS302
D405	8-719-820-41	s	DIODE 1SS302
D406	8-719-820-41	s	DIODE 1SS302
D407	8-719-820-41	s	DIODE 1SS302
D408	8-719-820-41	s	DIODE 1SS302
FB301	1-543-309-21	s	BEAD,FERRITE
FB401	1-469-324-21	s	FERRITE, EMI (SMD)
FB402	1-469-324-21	s	FERRITE, EMI (SMD)
FB403	1-469-324-21	s	FERRITE, EMI (SMD)
FB404	1-469-324-21	s	FERRITE, EMI (SMD)
FB405	1-469-324-21	s	FERRITE, EMI (SMD)
FB406	1-469-324-21	s	FERRITE, EMI (SMD)
FB407	1-469-324-21	s	FERRITE, EMI (SMD)
FB408	1-469-324-21	s	FERRITE, EMI (SMD)
FB409	1-469-324-21	s	FERRITE, EMI (SMD)
FB410	1-469-324-21	s	FERRITE, EMI (SMD)
FB411	1-469-324-21	s	FERRITE, EMI (SMD)
FB412	1-469-324-21	s	FERRITE, EMI (SMD)
FB413	1-469-324-21	s	FERRITE, EMI (SMD)
IC101	8-759-573-91	s	IC AD8055ART-REEL7
IC102	8-759-987-27	s	IC LM1881M
IC103	8-759-549-00	s	IC SN74LV123APWR
IC201	8-759-573-91	s	IC AD8055ART-REEL7
IC202	8-759-987-27	s	IC LM1881M
IC402	8-759-925-74	s	IC SN74HC04ANS
IC403	8-759-988-13	s	IC LM393PS
IC404	8-759-678-06	s	IC CAT24WC02JI-TE13
IC501	8-759-284-66	s	IC TA78M08F (TE16L)
IC502	8-759-358-38	s	IC NJM78M05DLA(TE1)
IS401	1-251-047-11	s	SOCKET,IC
L101	1-412-915-11	s	INDUCTOR 0.010UH (2520)
L102	1-412-915-11	s	INDUCTOR 0.010UH (2520)
L201	1-412-915-11	s	INDUCTOR 0.010UH (2520)
L202	1-412-915-11	s	INDUCTOR 0.010UH (2520)
L501	1-424-642-11	s	COIL, CHOKE 47UH
L502	1-424-642-11	s	COIL, CHOKE 47UH
PS501	⚠ 1-533-282-21	s	CIRCUIT PROTECTOR 2A (3225)
Q101	8-729-143-07	s	TRANSISTOR 2SA1610-Y33
Q201	8-729-143-07	s	TRANSISTOR 2SA1610-Y33
Q401	8-729-027-52	s	TRANSISTOR DTC124EAK-T146
Q402	8-729-027-52	s	TRANSISTOR DTC124EAK-T146
Q403	8-729-027-52	s	TRANSISTOR DTC124EAK-T146
Q404	8-729-027-52	s	TRANSISTOR DTC124EAK-T146
Q405	8-729-027-52	s	TRANSISTOR DTC124EAK-T146
Q406	8-729-027-52	s	TRANSISTOR DTC124EAK-T146
Q407	8-729-027-52	s	TRANSISTOR DTC124EAK-T146
Q408	8-729-027-52	s	TRANSISTOR DTC124EAK-T146
R101	1-218-738-11	s	RESISTOR,CHIP 82K 1/16W(1608)
R102	1-218-732-11	s	RESISTOR,CHIP 47K 1/16W(1608)
R103	1-218-684-11	s	RESISTOR,CHIP 470 1/16W (1608)
R104	1-218-708-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R105	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)

(IF-828 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R106	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R107	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R108	1-218-698-11	s	RESISTOR,CHIP 1.8K 1/16W(1608)
R109	1-218-716-11	s	RESISTOR,CHIP 10K 1/16W(1608)
R110	1-220-253-11	s	RESISTOR CHIP 47 1/4W (3225)
R111	1-218-915-11	s	RESISTOR,CHIP 680K 1/16W(1608)
R112	1-218-752-11	s	RESISTOR,CHIP 330K 1/16W(1608)
R113	1-216-857-11	s	RESISTOR,CHIP 1M 1/16W(1608)
R114	1-220-244-11	s	RESISTOR CHIP 33 1/4W (3225)
R115	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R116	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R201	1-218-738-11	s	RESISTOR,CHIP 82K 1/16W(1608)
R202	1-218-732-11	s	RESISTOR,CHIP 47K 1/16W(1608)
R203	1-218-684-11	s	RESISTOR,CHIP 470 1/16W (1608)
R204	1-218-708-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R205	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R206	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R207	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R208	1-218-698-11	s	RESISTOR,CHIP 1.8K 1/16W(1608)
R209	1-218-716-11	s	RESISTOR,CHIP 10K 1/16W(1608)
R210	1-220-253-11	s	RESISTOR CHIP 47 1/4W (3225)
R211	1-218-915-11	s	RESISTOR,CHIP 680K 1/16W(1608)
R212	1-218-752-11	s	RESISTOR,CHIP 330K 1/16W(1608)
R213	1-216-857-11	s	RESISTOR,CHIP 1M 1/16W(1608)
R214	1-220-244-11	s	RESISTOR CHIP 33 1/4W (3225)
R215	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R216	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R301	1-220-238-11	s	RESISTOR CHIP 10 1/4W (3225)
R401	1-218-724-11	s	RESISTOR,CHIP 22K 1/16W(1608)
R402	1-218-738-11	s	RESISTOR,CHIP 82K 1/16W(1608)
R403	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R405	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R406	1-218-740-11	s	RESISTOR,CHIP 100K 1/16W(1608)
R407	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R408	1-218-724-11	s	RESISTOR,CHIP 22K 1/16W(1608)
R409	1-218-668-11	s	RESISTOR,CHIP 100 1/16W (1608)
R410	1-218-668-11	s	RESISTOR,CHIP 100 1/16W (1608)
R411	1-218-668-11	s	RESISTOR,CHIP 100 1/16W (1608)
R412	1-218-668-11	s	RESISTOR,CHIP 100 1/16W (1608)
R413	1-218-668-11	s	RESISTOR,CHIP 100 1/16W (1608)
R414	1-218-668-11	s	RESISTOR,CHIP 100 1/16W (1608)
R416	1-218-732-11	s	RESISTOR,CHIP 47K 1/16W(1608)
R417	1-218-716-11	s	RESISTOR,CHIP 10K 1/16W(1608)
R418	1-218-716-11	s	RESISTOR,CHIP 10K 1/16W(1608)
R419	1-218-716-11	s	RESISTOR,CHIP 10K 1/16W(1608)
R420	1-218-716-11	s	RESISTOR,CHIP 10K 1/16W(1608)
R421	1-218-732-11	s	RESISTOR,CHIP 47K 1/16W(1608)
R422	1-218-716-11	s	RESISTOR,CHIP 10K 1/16W(1608)
R423	1-216-864-11	s	RESISTOR,CHIP 0 1/16W (1608)
R424	1-216-864-11	s	RESISTOR,CHIP 0 1/16W (1608)
R426	1-218-680-11	s	RESISTOR,CHIP 330 1/16W(1608)
R427	1-218-680-11	s	RESISTOR,CHIP 330 1/16W(1608)
R428	1-218-708-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R429	1-218-732-11	s	RESISTOR,CHIP 47K 1/16W(1608)
R501	1-218-614-11	s	RESISTOR CHIP 10/1W (5331)
R502	1-218-614-11	s	RESISTOR CHIP 10/1W (5331)
RB401	1-233-270-11	o	RESISTOR, NETWORK (8 GANG) 10K
RB402	1-239-998-11	s	RESISTOR, CHIP NETWORK 100

(IF-828 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
RB403	1-239-998-11	s	RESISTOR, CHIP NETWORK 100
RB404	1-233-270-11	o	RESISTOR, NETWORK (8 GANG) 10K
RB405	1-239-412-11	s	NETWORK, RESISTOR 100 (1608)
RB406	1-239-412-11	s	NETWORK, RESISTOR 100 (1608)
RB407	1-239-412-11	s	NETWORK, RESISTOR 100 (1608)

MB-915 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8326-973-A	o	MOUNTED CIRCUIT BOARD, MB-915
10pcs	7-682-948-09	s	SCREW +PSW 3X8
C101	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C102	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C103	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C104	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C105	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C106	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C107	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C108	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C109	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C110	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C111	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C112	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C113	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C114	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
C115	1-163-038-00	s	CAPACITOR, CERAMIC 0.1MF/25V
CN1	⚠ 1-691-960-11	o	PIN,CONNECTOR (PC BOARD) 3P
CN2	⚠ 1-691-960-11	o	PIN,CONNECTOR (PC BOARD) 3P
CN3	1-766-538-11	o	CONNECTOR, BOARD TO BOARD
CN353	1-778-022-11	o	CONNECTOR, BOARD TO BOARD 24P
CN453	1-778-022-11	o	CONNECTOR, BOARD TO BOARD 24P
R101	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R102	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R103	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R104	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R105	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R106	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R107	1-220-253-11	s	RESISTOR CHIP 47 1/4W (3225)
R108	1-220-253-11	s	RESISTOR CHIP 47 1/4W (3225)
R109	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R110	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R111	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R112	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
RB101	1-234-078-11	s	RES, CHIP NETWORK 47
RB102	1-234-078-11	s	RES, CHIP NETWORK 47
RB103	1-234-078-11	s	RES, CHIP NETWORK 47
RB104	1-234-078-11	s	RES, CHIP NETWORK 47
RB105	1-234-078-11	s	RES, CHIP NETWORK 47
RB106	1-234-078-11	s	RES, CHIP NETWORK 47
RB107	1-234-078-11	s	RES, CHIP NETWORK 47
RB108	1-234-078-11	s	RES, CHIP NETWORK 47
RB109	1-234-078-11	s	RES, CHIP NETWORK 47
RB110	1-234-078-11	s	RES, CHIP NETWORK 47
RB111	1-234-078-11	s	RES, CHIP NETWORK 47
RB112	1-234-078-11	s	RES, CHIP NETWORK 47
RB113	1-234-078-11	s	RES, CHIP NETWORK 47
RB114	1-234-078-11	s	RES, CHIP NETWORK 47
RB115	1-234-078-11	s	RES, CHIP NETWORK 47
RB116	1-234-078-11	s	RES, CHIP NETWORK 47
RB117	1-234-078-11	s	RES, CHIP NETWORK 47
RB118	1-234-078-11	s	RES, CHIP NETWORK 47
RB119	1-234-078-11	s	RES, CHIP NETWORK 47
RB120	1-234-078-11	s	RES, CHIP NETWORK 47
RB121	1-234-078-11	s	RES, CHIP NETWORK 47
RB122	1-234-078-11	s	RES, CHIP NETWORK 47
RB123	1-234-078-11	s	RES, CHIP NETWORK 47
RB124	1-234-078-11	s	RES, CHIP NETWORK 47

(MB-915 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
RB125	1-234-078-11	s	RES, CHIP NETWORK 47
RB126	1-234-078-11	s	RES, CHIP NETWORK 47

FRAME

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-698-873-11	s	FAN, DC
HN001	1-960-173-11	o	HARNESS (WITH INLET) (TO CN1/MB-915 BOARD) (TO AC INLET:for A)
HN002	1-960-173-11	o	HARNESS (WITH INLET) (TO CN2/MB-915 BOARD) (TO AC INLET:for B)
HN003	----------		HARNESS (TO CN2/CN-2122 BOARD)
1pc	1-561-515-00	o	CONNECTOR HOUSING (3P)
3pcs	1-560-372-00	o	TERMINAL, PRESS (TO FAN)

2-4. Power Cords List

Ref. No. or Q'ty	Part No.	SP	Description
<For customers in Japan>			
1pc	⚠ 1-776-997-11	s	CORD SET, POWER
1pc	⚠ 1-793-461-11	o	PLUG, CONVERSION (3P-2P)
<For customers in the U.S.A. and Canada>			
1pc	⚠ 1-557-377-11	s	CORD, AC POWER
<For customers in the United Kingdom>			
1pc	⚠ 1-782-929-11	s	CORD,POWER (BS 3P)

2-5. Optional Fixtures List

Part No.	SP	Description
A-8327-356-A	s	EXTENSION BOARD, EX-833 (For main board)
A-8327-357-A	s	EXTENSION BOARD, EX-834 (For connector board)

Section 3
Semiconductor Pin Assignments

The following describes the semiconductor types used in this unit.
For semiconductors marked with page numbers in the index, refer to the corresponding pages in this section. However, in some cases incompatible types are also listed, therefore, when a part is to be replaced, also refer to the Spare Parts section.
In addition, for semiconductors with ID Nos., refer to the separate CD-ROM titled “Semiconductor Pin Assignments” (Sony Part No. 9-968-546-xx) that allows searching for parts by semiconductor type or ID No.
The semiconductors in the manual or on the CD-ROM are listed by equivalent types. Thus the external view or the index mark indication may differ from the actual type.
Pin assignments and block diagrams are based on the IC manufacturer’s data book.

本機に使用されている半導体型名の一覧を下記に示します。
索引中，ページが記載されている半導体は，本章の該当ページを参照してください。ただし，互換性のない型名を併記している場合がありますので，部品を交換するときは，Spare Partsの章を参照してください。
また，ID番号が記載されている半導体は，別途発行の “Semiconductor Pin Assignments” CD−ROM版 (ソニー部品番号：9−968−546−xx)を参照してください。
半導体型名またはID番号から検索ができます。
マニュアルまたはCD−ROMに掲載されている半導体は，それぞれの機能を等価的に表わしたものです。
外観やインデックスマークの表示方法が実物と異なる場合があります。
ピン配置およびブロック図はICメーカーのデータブックに従いました。

DIODE — **Page or ID No.**

1SS302 ..... DC001-01
1SS302-TE85L DC001-01

TRANSISTOR — **Page or ID No.**

2SA1610-T1Y34 ..... TC001-01
2SA1610-Y33 ..... TC001-01

DTC124EKA-T146 ..... TC001-03

IC — **Page or ID No.**

AD8055ART-REEL7 ..... AD8055ART-REEL7

CAT24WC02JI-TE13 3-2

EPM7032SLC44-10(05) 3-2

LM1881M LM1881N
LM1881MX LM1881N
LM393PS UA393DC
LM393PS-E20 ..... UA393DC

NJM78M05DLA(TE1) ..... NJM78M12DLA(TE1)
NJM78M08DLA(TE1) TA78M09F

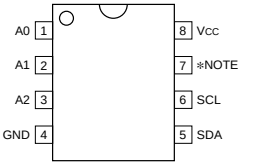
SN74HC04ANS TC74HC04P
SN74HC04ANSR TC74HC04P
SN74LV123APWR TC74HC123P

TA78M08F(TE16L) TA78M09F

IC

CAT24WC02JI-TE13 (CATALYST)

SERIAL EEPROM
—TOP VIEW—



INPUTS
A0 - A2 : ADDRESS
SCL : SERIAL CLOCK
$\overline{WC}$: WRITE CONTROL
WP : WRITE PROTECT

INPUT/OUTPUT
SDA : SERIAL DATA

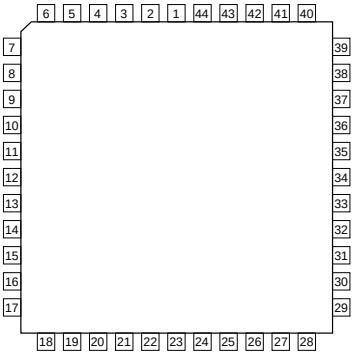
OTHERS
NC : NO CONNECTION
TEST : TEST PIN

∗NOTE :

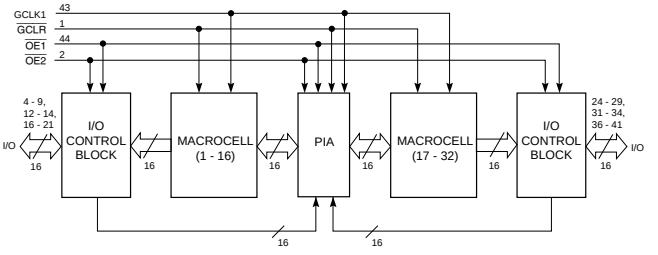
TYPE	MEMORY	PIN 7
NM24C16	16 K	NC
X24C02 S-24C02	2 K	$\overline{WC}$
CAT24WC02	2 K	WP
X24C04	4 K	TEST
X24C08	8 K	TEST

EPM7032SLC44-10(05) (ALTERA)

PROGRAMMABLE LOGIC DEVICE
—TOP VIEW—



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I	INPUT/$\overline{GCLR}$	12	I/O	I/O	23	—	VCC	34	I/O	I/O
2	I	INPUT/$\overline{OE2}$	13	I/O	I/O (TMS)	24	I/O	I/O	35	—	VCC
3	—	VCC	14	I/O	I/O	25	I/O	I/O	36	I/O	I/O
4	I/O	I/O	15	—	VCC	26	I/O	I/O	37	I/O	I/O
5	I/O	I/O	16	I/O	I/O	27	I/O	I/O	38	I/O	I/O (TDO)
6	I/O	I/O	17	I/O	I/O	28	I/O	I/O	39	I/O	I/O
7	I/O	I/O (TDI)	18	I/O	I/O	29	I/O	I/O	40	I/O	I/O
8	I/O	I/O	19	I/O	I/O	30	—	GND	41	I/O	I/O
9	I/O	I/O	20	I/O	I/O	31	I/O	I/O	42	—	GND
10	—	GND	21	I/O	I/O	32	I/O	I/O (TCK)	43	I	INPUT/GCLK1
11	—	VCC	22	—	GND	33	I/O	I/O	44	I	INPUT/$\overline{OE1}$



∗ABOVE DIAGRAM SHOWS CONDITIONS BEFORE PROGRAMMING

http://getMANUAL.com

Section 4
Circuit Description and Overall Block Diagram

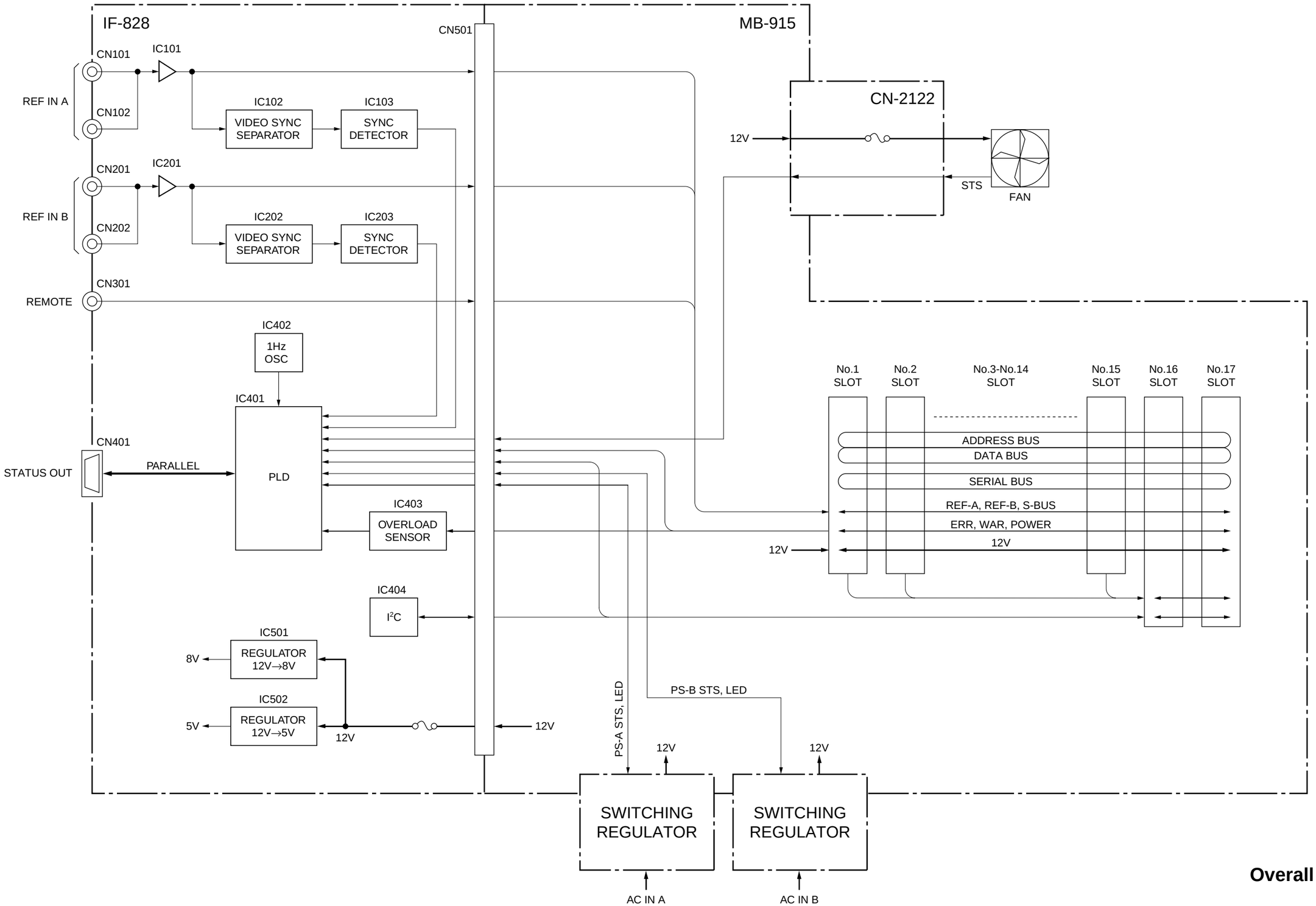
4−1．回路概説

(IF−828基板)
IF−828基板は，2系統 (A/B) のリファレンス信号に対応できるように，2ブロックの回路が実装されている。
SYNC SEPARATOR IC (IC102, IC202) に入力されたリファレンスブラックバースト信号は，ここでH−SYNCが抜き出される。その後IC103, IC203で信号の有無が検出される。検出された信号は，PLD (IC401) で処理される。IC101でバッファされた信号は，MB−915基板で終端され，各オプション基板に分配される。
REMOTE (S−BUS) の信号は基板内を通過し，MB−915基板を経て各オプション基板に分配される。
PLD (IC401) では，電源 (A, B)，ファン，およびオプション基板の過電流 (IC403) のステータスを受け，処理を行ない，STATUS OUTへ出力する。

4-1. Circuit Description

(IF-828 board)
The IF-828 board mounts two circuit blocks so that it can correspond to the two reference signals (A and B).
The reference black burst signal is input to the sync separator IC (IC102 or IC202), then the H-sync signal is extracted by IC102 or IC202. After that, the existence of the signal is detected by IC103 or IC203. The detected signal is processed by PLD (IC401). The signal buffered by IC101 is terminated by the MB-915 board and distributed to each optional board.
A REMOTE (S-BUS) signal passes through the board and is distributed to each optional board via the MB-915 board.
PLD (IC401) receives the overcurrent (IC403) status of power units (A and B), a fan, and optional boards, processes it, and outputs it to the STATUS OUT connector.

4-2. Overall Block Diagram



Section 5
Schematic Diagrams

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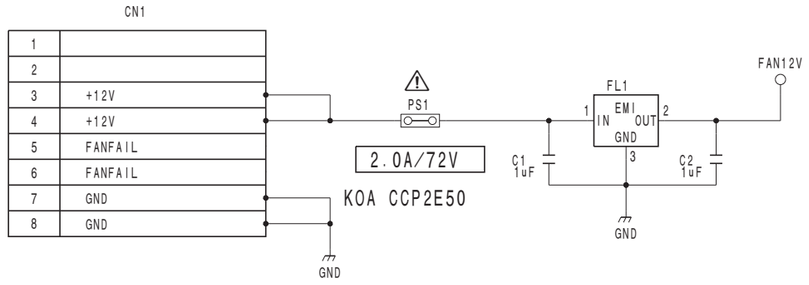
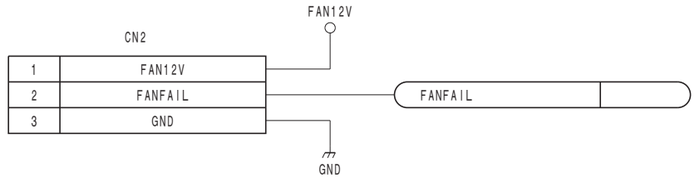
Board Name	Function	Page
CN-2122	FAN Connector Board	5-1
IF-828	Interface Board	5-2
MB-915	Motherboard	5-4
Frame Wiring	—	5-8

PFV-SP3300 (SY): S/N 10001 and Higher

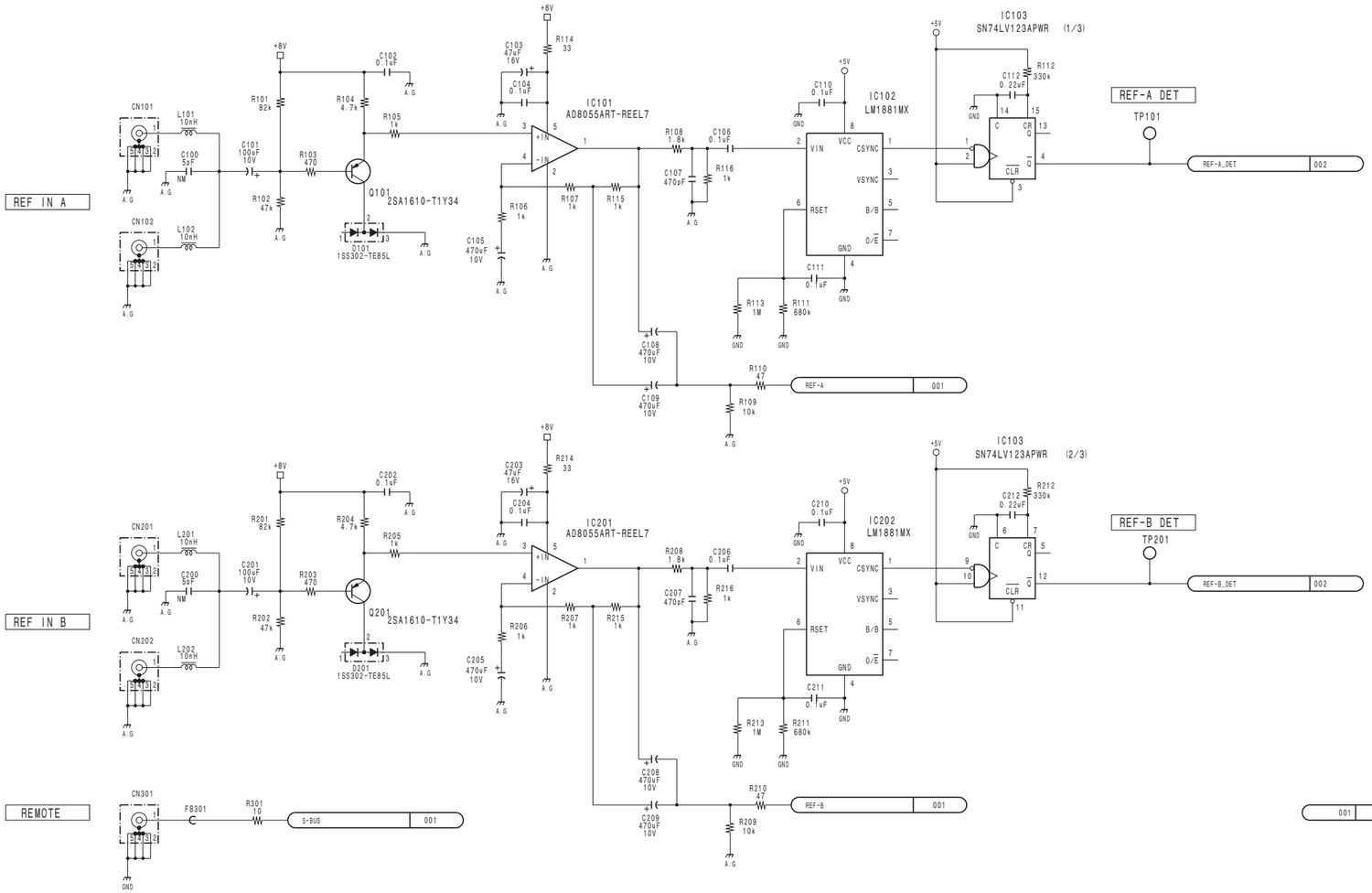


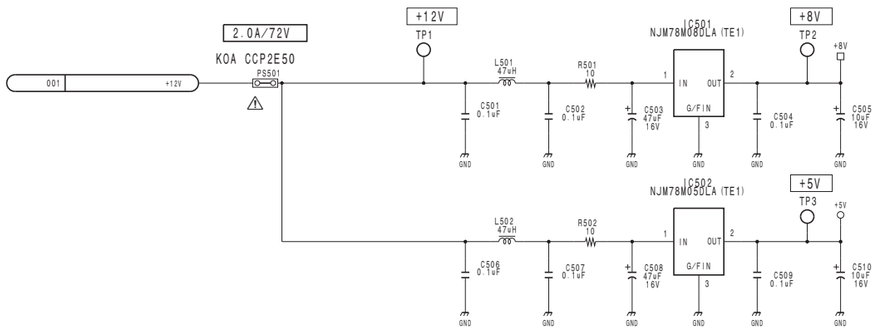


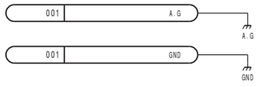
CN-2122
BOARD NO. 1-679-666-11
LOT NO. 081-

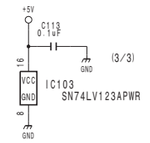
 IF-828 (1/2)

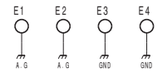
PFV-SP3300 (SY): S/N 10001 and Higher











CN501

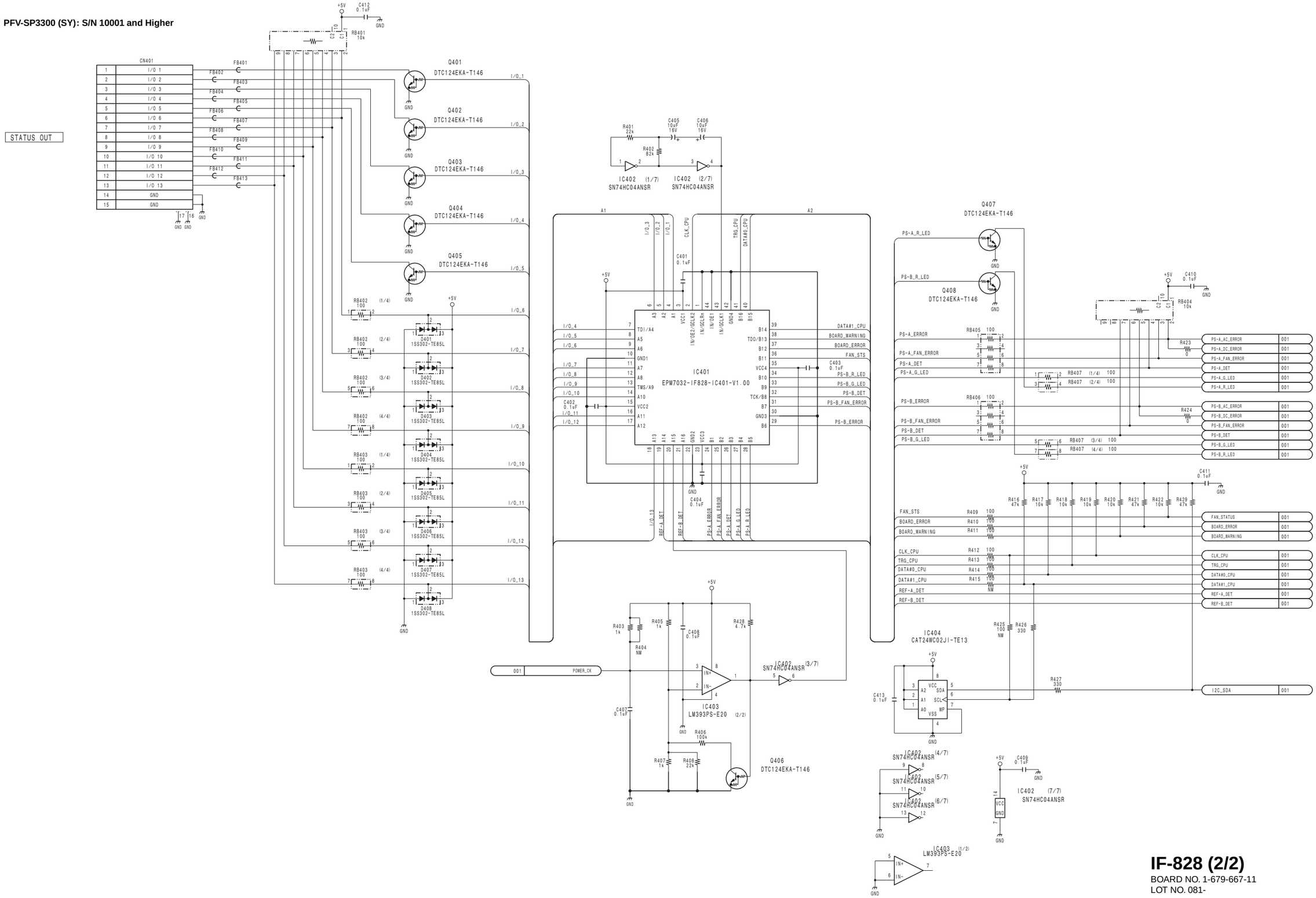
	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND
2	+12V	+12V	+12V	+12V	+12V	GND
3	CLK_CPU	TRG_CPU		DATA#0_CPU	DATA#1_CPU	GND
4	PS-B_AC_ERROR	PS-B_DC_ERROR		PS-B_FAN_ERROR	PS-B_DET	GND
5	PS-A_AC_ERROR	PS-A_DC_ERROR		PS-A_FAN_ERROR	PS-A_DET	GND
6	PS-A_G_LED	PS-A_R_LED		PS-B_G_LED	PS-B_R_LED	GND
7	BOARD_ERROR	BOARD_WARNING		POWER_CK	FAN_STATUS	GND
8					I2C_SDA	GND
9	A.G	A.G	A.G	A.G	A.G	GND
10	REF-B	A.G	S-BUS	A.G	REF-A	GND
11	A.G	A.G	A.G	A.G	A.G	GND

MB915. CN501. 1A-E
MB915. CN501. 2A-E
MB915. CN501. 3A-E
MB915. CN501. 4A-E
MB915. CN501. 5A-E
MB915. CN501. 6A-E
MB915. CN501. 7A-E
MB915. CN501. 8A-E
MB915. CN501. 9A-E
MB915. CN501. 10A-E
MB915. CN501. 11A-E

IF-828 (1/2)

BOARD NO. 1-679-667-11
LOT NO. 081-

PFV-SP3300 (SY): S/N 10001 and Higher



IF-828 (2/2)
BOARD NO. 1-679-667-11
LOT NO. 081-

PFV-SP3300 (SY): S/N 10001 and Higher

CN011

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT1	D14	D15	GND
10	GND	FD4	VTT	VTT	RES	GND	GND
11	GND	VD4	HD4	VTT	VCK4+	VCK4-	GND

CN021

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT2	D14	D15	GND
10	GND	FD4	VTT	VTT	RES	GND	GND
11	GND	VD4	HD4	VTT	VCK4+	VCK4-	GND

CN031

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT3	D14	D15	GND
10	GND	FD4	VTT	VTT	RES	GND	GND
11	GND	VD4	HD4	VTT	VCK4+	VCK4-	GND

CN012

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#12A	SPARE#12B	GND	SPARE#12D	SPARE#12E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND	GND					GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_1	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN022

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#12A	SPARE#12B	GND	SPARE#12D	SPARE#12E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND		GND				GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_2	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN032

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#34A	SPARE#34B	GND	SPARE#34D	SPARE#34E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND	GND	GND				GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_3	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN071

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT7	D14	D15	GND
10	GND	FD3	VTT	VTT	RES	GND	GND
11	GND	VD3	HD3	VTT	VCK3+	VCK3-	GND

CN081

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT8	D14	D15	GND
10	GND	FD3	VTT	VTT	RES	GND	GND
11	GND	VD3	HD3	VTT	VCK3+	VCK3-	GND

CN091

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT9	D14	D15	GND
10	GND	FD2	VTT	VTT	RES	GND	GND
11	GND	VD2	HD2	VTT	VCK2+	VCK2-	GND

CN072

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#78A	SPARE#78B	GND	SPARE#78D	SPARE#78E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND	GND	GND				GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_7	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN082

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#78A	SPARE#78B	GND	SPARE#78D	SPARE#78E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND				GND		GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_8	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN092

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#910A	SPARE#910B	GND	SPARE#910D	SPARE#910E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND	GND			GND		GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_9	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

MB-915 (1/2)

CN041

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT4	D14	D15	GND
10	GND	FD4	VTT	VTT	RES	GND	GND
11	GND	VD4	HD4	VTT	VCK4+	VCK4-	GND

CN051

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT5	D14	D15	GND
10	GND	FD3	VTT	VTT	RES	GND	GND
11	GND	VD3	HD3	VTT	VCK3+	VCK3-	GND

CN061

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT6	D14	D15	GND
10	GND	FD3	VTT	VTT	RES	GND	GND
11	GND	VD3	HD3	VTT	VCK3+	VCK3-	GND

CN042

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#34A	SPARE#34B	GND	SPARE#34D	SPARE#34E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND			GND			GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_4	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN052

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#56A	SPARE#56B	GND	SPARE#56D	SPARE#56E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND	GND		GND			GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_5	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN062

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#56A	SPARE#56B	GND	SPARE#56D	SPARE#56E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND		GND	GND			GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_6	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN101

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT10	D14	D15	GND
10	GND	FD2	VTT	VTT	RES	GND	GND
11	GND	VD2	HD2	VTT	VCK2+	VCK2-	GND

CN111

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT11	D14	D15	GND
10	GND	FD2	VTT	VTT	RES	GND	GND
11	GND	VD2	HD2	VTT	VCK2+	VCK2-	GND

CN121

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT12	D14	D15	GND
10	GND	FD2	VTT	VTT	RES	GND	GND
11	GND	VD2	HD2	VTT	VCK2+	VCK2-	GND

CN102

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#910A	SPARE#910B	GND	SPARE#910D	SPARE#910E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND		GND		GND		GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_10	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN112

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#1112A	SPARE#1112B	GND	SPARE#1112D	SPARE#1112E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND	GND	GND		GND		GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_11	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN122

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#1112A	SPARE#1112B	GND	SPARE#1112D	SPARE#1112E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND			GND	GND		GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_12	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

MB-915 (1/2)

BOARD NO. 1-679-668-11
LOT NO. 081-

PFV-SP3300 (SY): S/N 10001 and Higher

CN131

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT13	D14	D15	GND
10	GND	FD1	VTT	VTT	RES	GND	GND
11	GND	VD1	HD1	VTT	VCK1+	VCK1-	GND

CN141

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT14	D14	D15	GND
10	GND	FD1	VTT	VTT	RES	GND	GND
11	GND	VD1	HD1	VTT	VCK1+	VCK1-	GND

CN151

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13		GND
5	GND	A14	A15	WR	AD/CS		GND
6	GND	D0	D1	D2	D3		GND
7	GND	D4	D5	D6	D7		GND
8	GND	D8	D9	D10	D11		GND
9	GND	D12	D13	INT15	D14	D15	GND
10	GND	FD1	VTT	VTT	RES	GND	GND
11	GND	VD1	HD1	VTT	VCK1+	VCK1-	GND

CN132

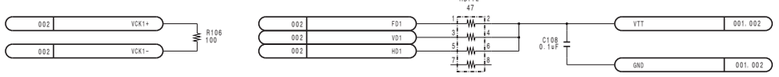
	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#1314A	SPARE#1314B	GND	SPARE#1314D	SPARE#1314E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND	GND		GND	GND		GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_13	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN142

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#1314A	SPARE#1314B	GND	SPARE#1314D	SPARE#1314E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND		GND	GND	GND		GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_14	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN152

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND			GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#1516A	SPARE#1516B	GND	SPARE#1516D	SPARE#1516E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND	GND	GND	GND	GND		GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_15	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND



Power Supply A

CN301

	A	B	C	D
1	AC (N) 1	AC (N) 1	AC (N) 1	AC (N) 1
2	AC (N) 1	AC (N) 1	AC (N) 1	AC (N) 1
3	AC (N) 1	AC (N) 1	AC (N) 1	AC (N) 1
4	AC (N) 1	AC (N) 1	AC (N) 1	AC (N) 1
5	AC (N) 1	AC (N) 1	AC (N) 1	AC (N) 1
6	AC (N) 1	AC (N) 1	AC (N) 1	AC (N) 1

CN302

	A	B	C	D
1	AC (L) 1	AC (L) 1	AC (L) 1	AC (L) 1
2	AC (L) 1	AC (L) 1	AC (L) 1	AC (L) 1
3	AC (L) 1	AC (L) 1	AC (L) 1	AC (L) 1
4	AC (L) 1	AC (L) 1	AC (L) 1	AC (L) 1
5	AC (L) 1	AC (L) 1	AC (L) 1	AC (L) 1
6	AC (L) 1	AC (L) 1	AC (L) 1	AC (L) 1

CN351

	A	B	C	D
1	+12V	+12V	+12V	+12V
2	+12V	+12V	+12V	+12V
3	+12V	+12V	+12V	+12V
4	+12V	+12V	+12V	
5	+12V	+12V	+12V	
6	+12V	+12V	+12V	

CN352

	A	B	C	D
1	+12V	+12V	GND	GND
2	+12V	+12V	GND	GND
3	+12V	+12V	GND	GND
4	+12V	GND	GND	GND
5	+12V	GND	GND	GND
6	+12V	GND	GND	GND

CN353

	A	B	C	D
1	GND	GND	GND	PS-A_AC_ERROR
2	GND	GND	GND	PS-A_DC_ERROR
3	GND	GND	GND	PS-A_FAN_ERROR
4	GND	GND	GND	PS-A_G_LED
5	GND	GND	GND	PS-A_R_LED
6	GND	PS-A_DET	-S	PC

Power Supply B

CN401

	A	B	C	D
1	AC (N) 2	AC (N) 2	AC (N) 2	AC (N) 2
2	AC (N) 2	AC (N) 2	AC (N) 2	AC (N) 2
3	AC (N) 2	AC (N) 2	AC (N) 2	AC (N) 2
4	AC (N) 2	AC (N) 2	AC (N) 2	AC (N) 2
5	AC (N) 2	AC (N) 2	AC (N) 2	AC (N) 2
6	AC (N) 2	AC (N) 2	AC (N) 2	AC (N) 2

CN402

	A	B	C	D
1	AC (L) 2	AC (L) 2	AC (L) 2	AC (L) 2
2	AC (L) 2	AC (L) 2	AC (L) 2	AC (L) 2
3	AC (L) 2	AC (L) 2	AC (L) 2	AC (L) 2
4	AC (L) 2	AC (L) 2	AC (L) 2	AC (L) 2
5	AC (L) 2	AC (L) 2	AC (L) 2	AC (L) 2
6	AC (L) 2	AC (L) 2	AC (L) 2	AC (L) 2

CN451

	A	B	C	D
1	+12V	+12V	+12V	+12V
2	+12V	+12V	+12V	+12V
3	+12V	+12V	+12V	+12V
4	+12V	+12V	+12V	
5	+12V	+12V	+12V	
6	+12V	+12V	+12V	

CN452

	A	B	C	D
1	+12V	+12V	GND	GND
2	+12V	+12V	GND	GND
3	+12V	+12V	GND	GND
4	+12V	GND	GND	GND
5	+12V	GND	GND	GND
6	+12V	GND	GND	GND

CN453

	A	B	C	D
1	GND	GND	GND	PS-B_AC_ERROR
2	GND	GND	GND	PS-B_DC_ERROR
3	GND	GND	GND	PS-B_FAN_ERROR
4	GND	GND	GND	PS-B_G_LED
5	GND	GND	GND	PS-B_R_LED
6	GND	PS-B_DET	-S	PC

CN501

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	+12V	+12V	+12V	+12V	+12V	GND
3	GND	ST01	ST02		ST03	ST04	GND
4	GND	PS-B_AC_ERROR	PS-B_DC_ERROR		PS-B_FAN_ERROR	PS-B_DET	GND
5	GND	PS-A_AC_ERROR	PS-A_DC_ERROR		PS-A_FAN_ERROR	PS-A_DET	GND
6	GND	PS-A_G_LED	PS-A_R_LED		PS-B_G_LED	PS-B_R_LED	GND
7	GND	ERROR	WARNING		POWER-CK	FAN_ST5	GND
8	GND	SERIAL-A+	SERIAL-A-			ST05	GND
9	GND	GND	GND	SLOT-ON_5	GND	GND	GND
10	GND	REF-B	GND	S-BUS	GND	REF-A	GND
11	GND	GND	GND	GND	GND	GND	GND

AC IN A

CN1

1	AC (N) 1
3	AC (L) 1

AC IN B

CN2

1	AC (N) 2
3	AC (L) 2

CN3

1	
2	
3	+12V
4	+12V
5	FAN_ST5
6	FAN_ST5
7	GND
8	GND

CN161

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13	VCK2+	GND
5	GND	A14	A15	WR	AD/CS	VCK2-	GND
6	GND	D0	D1	D2	D3	FD2	GND
7	GND	D4	D5	D6	D7	VD2	GND
8	GND	D8	D9	D10	D11	HD2	GND
9	GND	D12	D13	INT16	D14	D15	GND
10	GND	FD1	VTT	RES	GND	GND	GND
11	GND	VD1	HD1	VTT	VCK1+	VCK1-	GND

CN171

	z	a	b	c	d	e	f
1	GND	GND	GND	GND	GND	GND	GND
2	GND	A0	A1	A2	A3	A4	GND
3	GND	A5	A6	A7	A8	A9	GND
4	GND	A10	A11	A12	A13	VCK2+	GND
5	GND	A14	A15	WR	AD/CS	VCK2-	GND
6	GND	D0	D1	D2	D3	FD2	GND
7	GND	D4	D5	D6	D7	VD2	GND
8	GND	D8	D9	D10	D11	HD2	GND
9	GND	D12	D13	INT17	D14	D15	GND
10	GND	FD1	VTT	VTT	RES	GND	GND
11	GND	VD1	HD1	VTT	VCK1+	VCK1-	GND

CN162

	Z	A	B	C	D	E	F
1	GND	GND	GND	GND	CPU-A+	CPU-A-	GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND	SPARE#1516A	SPARE#1516B	GND	SPARE#1516D	SPARE#1516E	GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND					GND	GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_16	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN172

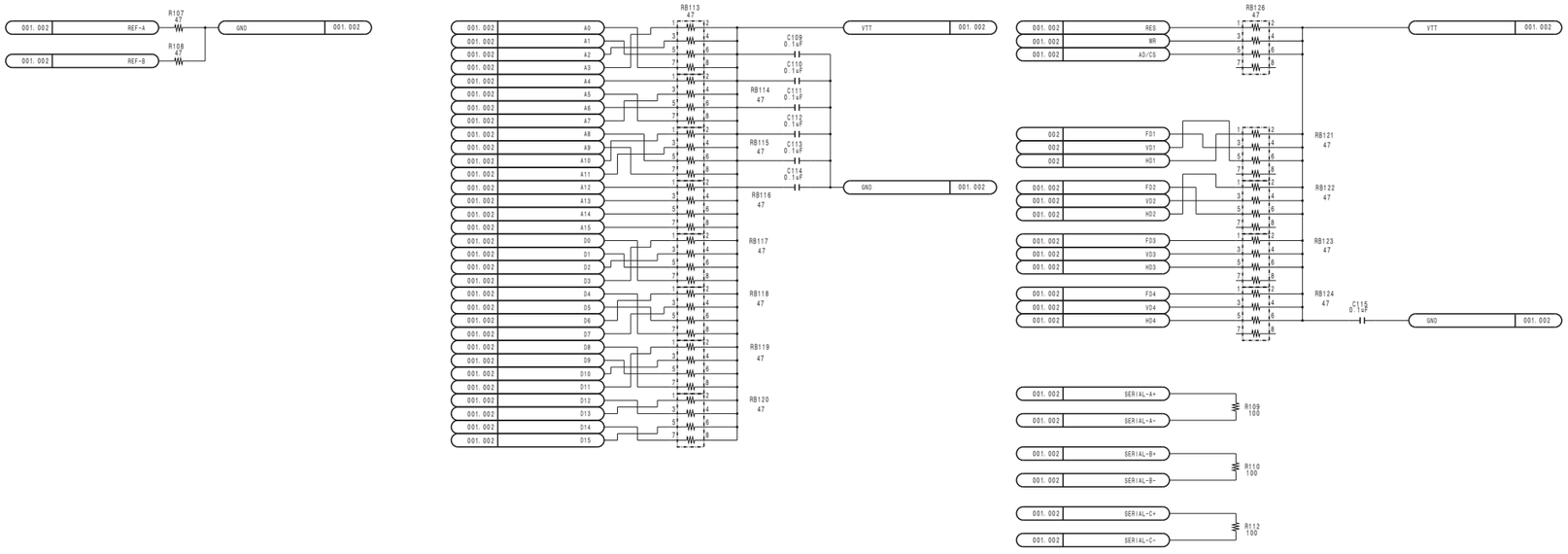
	Z	A	B	C	D	E	F
1	GND	GND	GND	GND	CPU-A-	CPU-A+	GND
2	GND						GND
3	GND						GND
4	GND						GND
5	GND						GND
6	GND						GND
7	GND						GND
8	GND			GND			GND
9	GND	SERIAL-B+	SERIAL-B-	SERIAL-C+	SERIAL-A+	SERIAL-A-	GND
10	GND	GND				GND	GND
11	GND	REF-B	SERIAL-C-	S-BUS	SLOT-ON_17	REF-A	GND
12							
13							
14							
15	GND	ERROR	WARNING	POWER-CK			GND
16	GND						GND
17	GND						GND
18	GND						GND
19	GND						GND
20	GND						GND
21	GND						GND
22	GND						GND
23	GND						GND
24	GND	+12V	+12V	+12V	+12V	+12V	GND
25	GND	GND	GND	GND	GND	GND	GND

CN163

	z	a	b	c	d	e	f
1	GND	VCK3+	VCK3-	GND	VCK4+	VCK4-	GND
2	GND	SLOT-ON_1	SLOT-ON_2	SLOT-ON_3	SLOT-ON_4	SLOT-ON_5	GND
3	GND	FD3	VD3	HD3	CPU-B+	CPU-B-	GND
4	GND	SLOT-ON_6	SLOT-ON_7	SLOT-ON_8	SLOT-ON_9	SLOT-ON_10	GND
5	GND	FD4	VD4	HD4		GND	GND
6	GND	SLOT-ON_11	SLOT-ON_12	SLOT-ON_13	SLOT-ON_14	SLOT-ON_15	GND
7	GND	INT1	INT2	INT3	INT4	INT5	GND
8	GND	INT6	INT7	INT8	INT9	INT10	GND
9	GND	INT11	INT12	INT13	INT14	INT15	GND
10	GND	INT16	INT17	STS1	STS2	STS3	GND
11	GND	SLOT-ON_16	SLOT-ON_17	SLOT-ON_S	STS4	STS5	GND

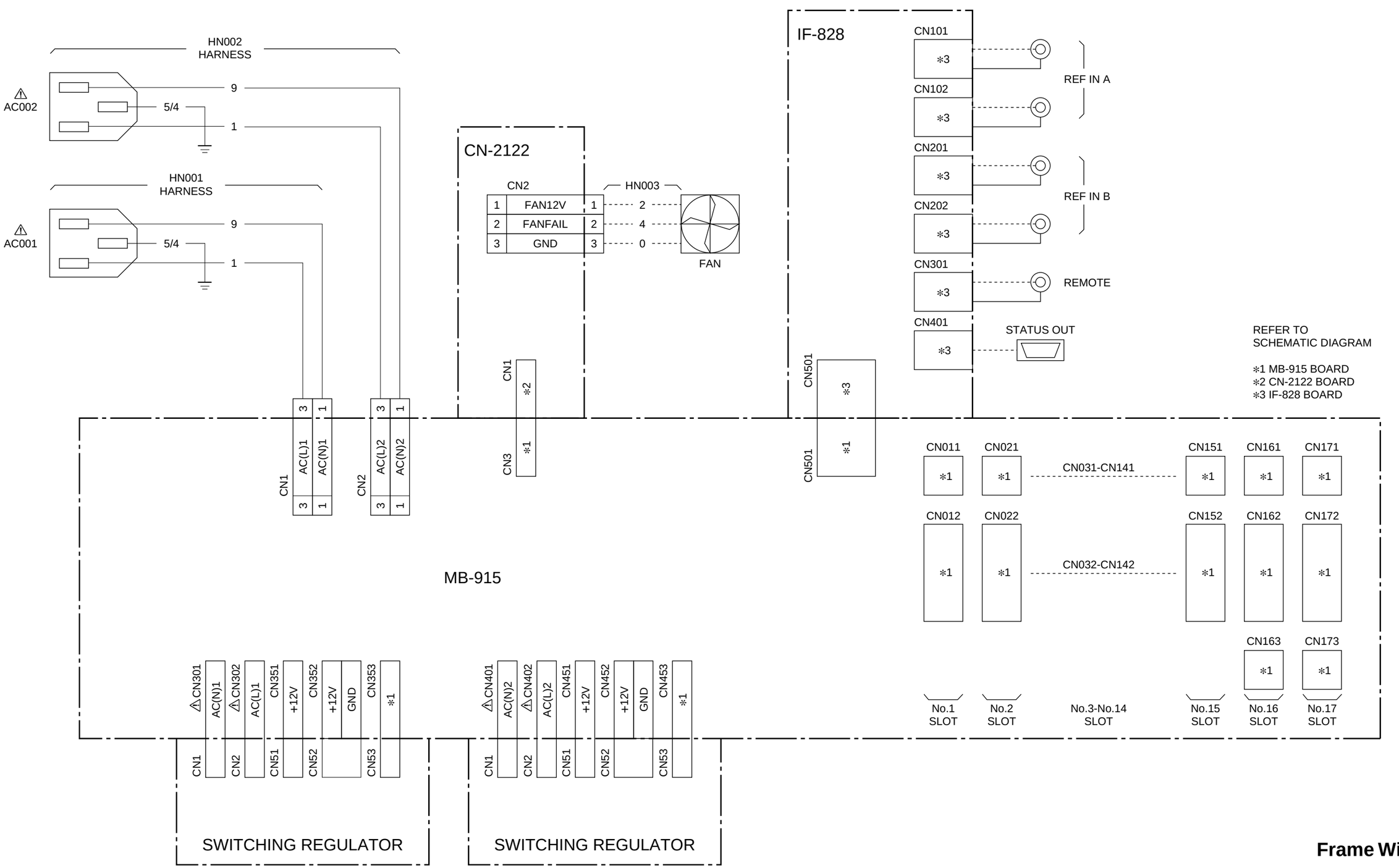
CN173

	z	a	b	c	d	e	f
1	GND	VCK3+	VCK3-	GND	VCK4+	VCK4-	GND
2	GND	SLOT-ON_1	SLOT-ON_2	SLOT-ON_3	SLOT-ON_4	SLOT-ON_5	GND
3	GND	FD3	VD3	HD3	CPU-B-	CPU-B+	GND
4	GND	SLOT-ON_6	SLOT-ON_7	SLOT-ON_8	SLOT-ON_9	SLOT-ON_10	GND
5	GND	FD4	VD4	HD4	GND	GND	GND
6	GND	SLOT-ON_11	SLOT-ON_12	SLOT-ON_13	SLOT-ON_14	SLOT-ON_15	GND
7	GND	INT1	INT2	INT3	INT4	INT5	GND
8	GND	INT6	INT7	INT8	INT9	INT10	GND
9	GND	INT11	INT12	INT13	INT14	INT15	GND
10	GND	INT16	INT17	STS1	STS2	STS3	GND
11	GND	SLOT-ON_16	SLOT-ON_17	SLOT-ON_S	STS4	STS5	GND



MB-915 (2/2)
BOARD NO. 1-679-668-11
LOT NO. 081-

Frame Wiring



REFER TO
SCHEMATIC DIAGRAM

∗1 MB-915 BOARD
∗2 CN-2122 BOARD
∗3 IF-828 BOARD

Frame Wiring

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http://getMANUAL.com

Section 6
Board Layouts

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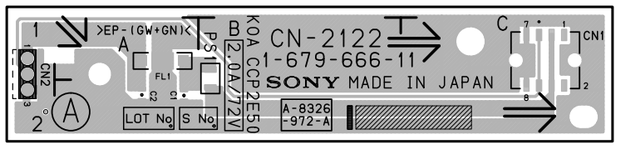
IF-828	Interface Board	6-2
MB-915	Motherboard	6-3

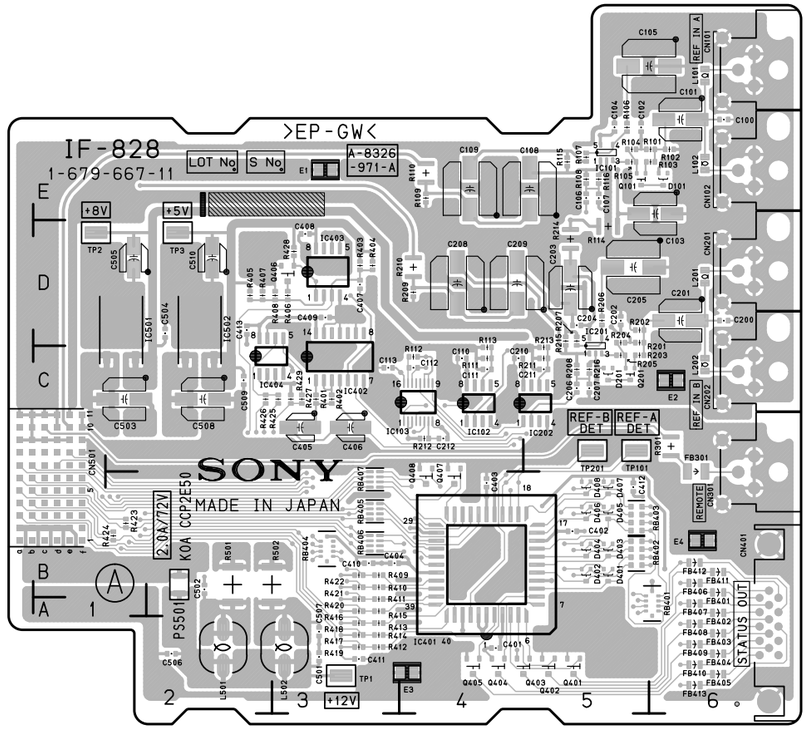


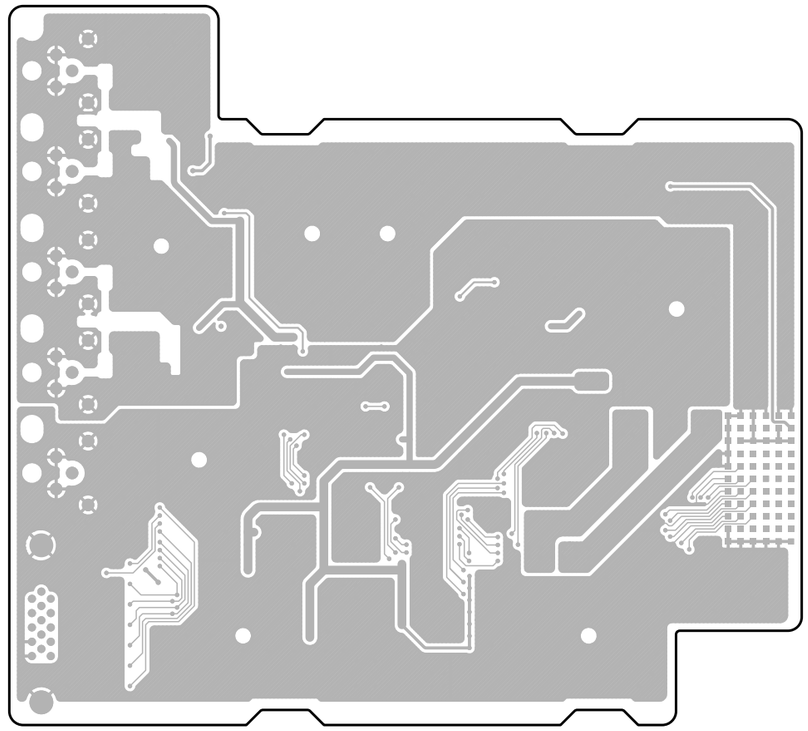
PFV-SP3300 (SY) : S/N 10001 and Higher

CN-2122 -A SIDE-
SUFFIX: -11

CN-2122 (1-679-666-11)

C1	A2
C2	A2
CN1	C1
CN2	A1
FL1	A1
PS1	B1





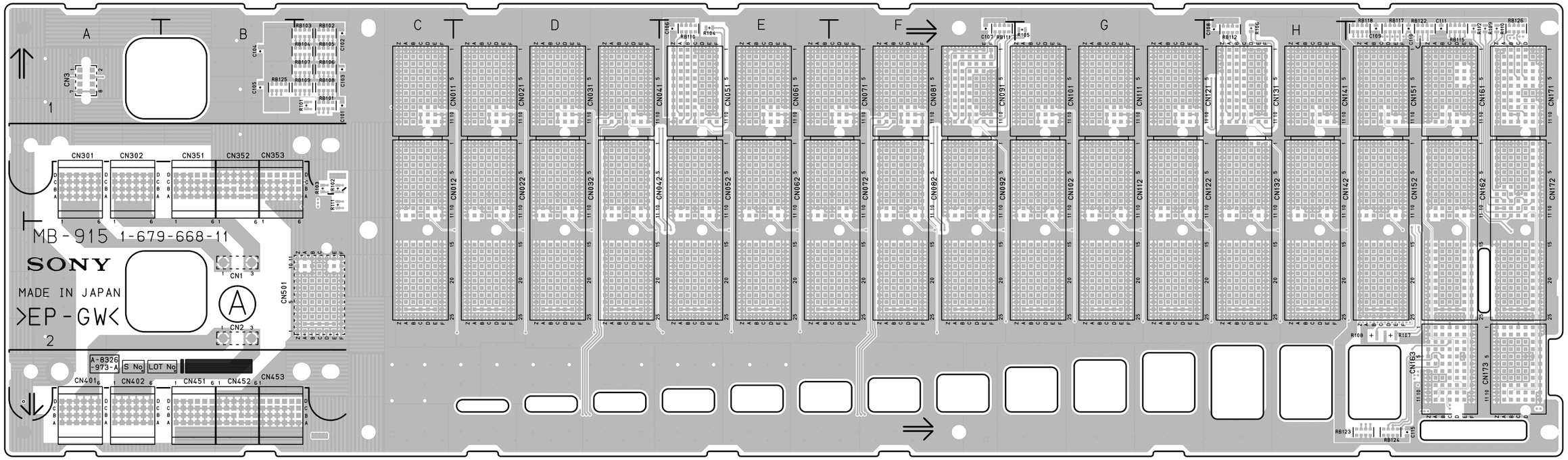
PFV-SP3300 (SY) : S/N 10001 and Higher

IF-828 -A SIDE-
SUFFIX: -11

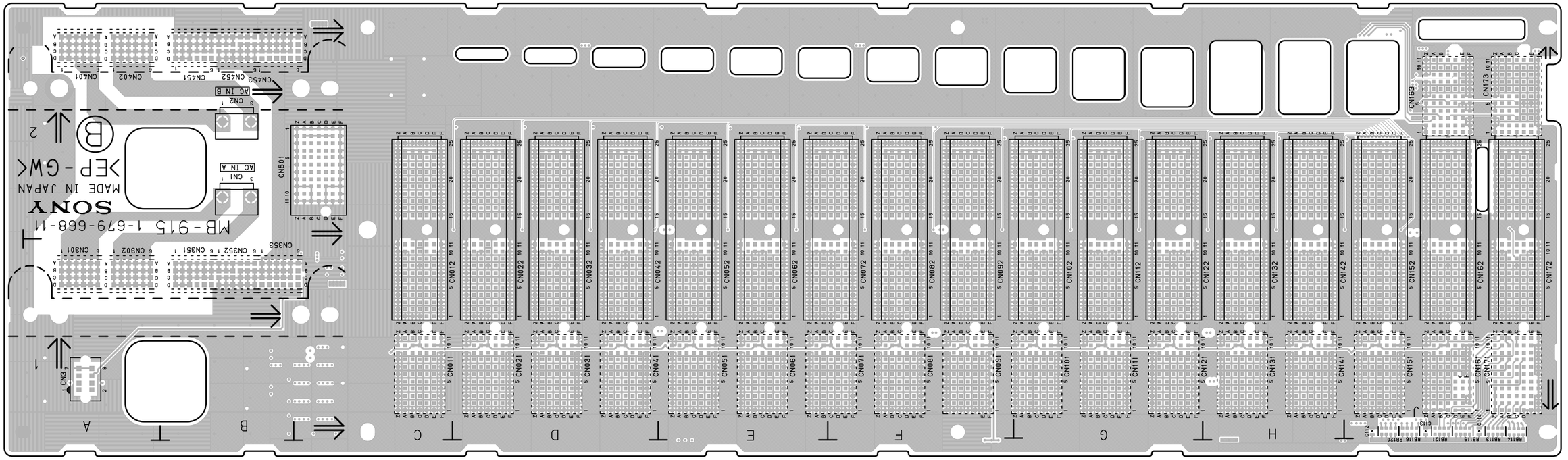
IF-828 -B SIDE-
SUFFIX: -11

IF-828 (1-679-667-11)

C100	E6	C411	A3	FB301	B6	Q201	C5	R212	C4	RB401	A6
C101	E6	C412	B5	FB401	B6	Q401	A5	R213	C5	RB402	B5
C102	E5	C413	D2	FB402	A6	Q402	A5	R214	D5	RB403	B5
C103	E6	C501	A3	FB403	A6	Q403	A4	R215	D5	RB404	B3
C104	E5	C502	B2	FB404	A6	Q404	A4	R216	C5	RB405	B3
C105	E5	C503	C1	FB405	A6	Q405	A4	R301	C6	RB406	B3
C106	E5	C504	D2	FB406	B6	Q406	D3	R401	C3	RB407	B3
C107	E5	C505	D1	FB407	A6	Q407	B4	R402	C3		
C108	E5	C506	A2	FB408	A6	Q408	B4	R403	D3	TP1	A3
C109	E4	C507	A3	FB409	A6			R404	D3	TP2	D1
C110	C4	C508	C2	FB410	A6	R101	E6	R405	D2	TP3	D2
C111	C4	C509	C2	FB411	B6	R102	E6	R406	D3	TP101	C5
C112	C4	C510	D2	FB412	B6	R103	E6	R407	D2	TP201	C5
C113	C3			FB413	A6	R104	E5	R408	D3		
C200	D6	CN101	E6			R105	E5	R409	B3		
C201	D6	CN102	E6	IC101	E5	R106	E5	R410	B3		
C202	D5	CN201	D6	IC102	C4	R107	E5	R411	A3		
C203	D5	CN202	C6	IC103	C4	R108	E5	R412	A3		
C204	D5	CN301	B6	IC201	C5	R109	E4	R413	A3		
C205	D5	CN401	A6	IC202	C4	R110	E4	R414	A3		
C206	C5	CN501	B1	IC401	B4	R111	C4	R415	A3		
C207	C5			IC402	C3	R112	C4	R416	A3		
C208	D4	D101	E6	IC403	D3	R113	C4	R417	A3		
C209	D4	D201	C5	IC404	C2	R114	D5	R418	A3		
C210	C4	D401	B5	IC501	D1	R115	E5	R419	A3		
C211	C5	D402	B5	IC502	D2	R116	E5	R420	A3		
C212	C4	D403	B5			R201	D5	R421	B3		
C401	A4	D404	B5	L101	E6	R202	D5	R422	B3		
C402	B5	D405	B5	L102	E6	R203	C5	R423	B1		
C403	B4	D406	B5	L201	D6	R204	D5	R424	B1		
C404	B3	D407	B5	L202	C6	R205	C5	R425	C3		
C405	C3	D408	B5	L501	A2	R206	D5	R426	C2		
C406	C3			L502	A3	R207	D5	R427	C3		
C407	D3	E1	E3			R208	C5	R428	D3		
C408	D3	E2	C6	PS501	B2	R209	D4	R429	C3		
C409	D3	E3	A4			R210	D4	R501	B2		
C410	B3	E4	B6	Q101	E5	R211	C5	R502	B2		



MB-915 -A SIDE-
SUFFIX: -11



PFV-SP3300 (SY) : S/N 10001 and Higher

MB-915 -B SIDE-
SUFFIX: -11

Location list : Next page

MB-915 (1-679-668-11)

*:B SIDE

C101	C1	RB105	C1
C102	C1	RB106	C1
C103	C1	RB107	C1
C104	B1	RB108	C1
C105	B1	RB109	C1
C106	E1	RB110	E1
C107	F1	RB111	F1
C108	H1	RB112	H1
C109	J1	RB113	*J1
C110	J1	RB114	*J1
C111	J1	RB115	J1
C112	*J1	RB116	*J1
C113	*J1	RB117	J1
C114	*J1	RB118	J1
C115	J2	RB119	*J1
		RB120	*J1
CN1	*B2	RB121	*J1
CN2	*B2	RB122	J1
CN3	*A1	RB123	J2
CN11	C1	RB124	J2
CN12	C2	RB125	B1
CN21	D1	RB126	J1
CN22	D2		
CN31	D1		
CN32	D2		
CN41	D1		
CN42	D2		
CN51	E1		
CN52	E2		
CN61	E1		
CN62	E2		
CN71	F1		
CN72	F2		
CN81	F1		
CN82	F2		
CN91	F1		
CN92	F2		
CN101	G1		
CN102	G2		
CN111	G1		
CN112	G2		
CN121	G1		
CN122	G2		
CN131	H1		
CN132	H2		
CN141	H1		
CN142	H2		
CN151	J1		
CN152	J2		
CN161	J1		
CN162	J2		
CN163	J2		
CN171	J1		
CN172	J2		
CN173	J2		
CN301	A1		
CN302	A1		
CN351	B1		
CN352	B1		
CN353	B1		
CN401	A2		
CN402	A2		
CN451	B2		
CN452	B2		
CN453	B2		
CN501	*C2		
R101	C1		
R102	C1		
R103	C1		
R104	E1		
R105	G1		
R106	H1		
R107	J2		
R108	J2		
R109	J1		
R110	J1		
R111	C1		
R112	J1		
RB101	C1		
RB102	C1		
RB103	C1		
RB104	C1		

Board layouts : Previous page

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

Check the metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKA GE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 3.5 mA. Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 5.25 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 20 V AC range are suitable. (See Fig. A)

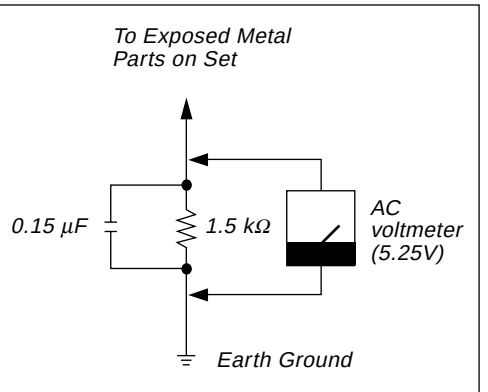


Fig A. Using an AC voltmeter to check AC leakage.

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PFV-SP3300 (SY) J, E
9-967-926-01

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